

Age Group	Percentage of Respondents
18-29	70%
30-49	60%
50-64	60%
65-74	60%
75 and older	50%

[REDACTED]

114

[REDACTED]

\_\_\_\_\_

From: Meer, Daniel  
Sent: Sunday, January 10, 2016 8:04 PM  
To: [Gregory.W.Buie@uscg.mil](mailto:Gregory.W.Buie@uscg.mil)  
Cc: Wampler, David <[Wampler.David@epa.gov](mailto:Wampler.David@epa.gov)>; Guria, Peter <[Guria.Peter@epa.gov](mailto:Guria.Peter@epa.gov)>; Allen, HarryL <[Allen.HarryL@epa.gov](mailto:Allen.HarryL@epa.gov)>; Eastman, Timothy G CIV <[Timothy.G.Eastman@uscg.mil](mailto:Timothy.G.Eastman@uscg.mil)>; [Richard.R.Boes@uscg.mil](mailto:Richard.R.Boes@uscg.mil); [Robert.N.Hildebrand@uscg.mil](mailto:Robert.N.Hildebrand@uscg.mil); [Steven.D.Poole@uscg.mil](mailto:Steven.D.Poole@uscg.mil); Helmlinger, Andrew <[Helmlinger.Andrew@epa.gov](mailto:Helmlinger.Andrew@epa.gov)>; Minor, Dustin <[Minor.Dustin@epa.gov](mailto:Minor.Dustin@epa.gov)>; Wise, Robert <[Wise.Robert@epa.gov](mailto:Wise.Robert@epa.gov)>; Benson, Craig <[Benson.Craig@epa.gov](mailto:Benson.Craig@epa.gov)>  
Subject: Re: Aliso Canyon Methane Leak

Thanks Greg. We can discuss further on Tuesday at the RRT9 meeting.

Dan

Sent from my iPhone  
Daniel Meer  
Assistant Director  
Superfund Division  
USEPA, Region 9

> On Jan 10, 2016, at 7:16 PM, Buie, Gregory W CIV <[Gregory.W.Buie@uscg.mil](mailto:Gregory.W.Buie@uscg.mil)> wrote:

>

> Dan,

>

> I am not going to answer your hypothetical question as you posed it; instead I will state our position regarding natural gas.

>

> Natural gas (aka methane) is not an oil. Response to a discharge or substantial threat of discharge of natural gas is not an oil response under FWPCA and is not funded from the OSLTF. However, oil may be present in some amounts when there is a natural gas incident, such as a leak, fire, or explosion from certain natural gas wells; usually production wells where there is natural gas condensate present. Such oil may discharge to navigable waters or adjoining shorelines or there may be a substantial threat of such a discharge. Therefore, while a response to a natural gas incident will in general not be a response under the FWPCA for which OSLTF funding is available, FOSC response to the discharge of oil to navigable waters or adjoining shorelines, or the substantial threat of such a discharge, may be funded from the OSLTF. When confronted with a natural gas incident, FOSCs should explain and document how the response for which OSLTF funding will be used is for the primary purpose of removing a discharge of oil to navigable waters, or adjoining shorelines or mitigating or preventing the substantial threat of such a discharge.

>

> We have been monitoring the situation with the Aliso Canyon methane leak for several weeks now. We know that the leaking well is a storage well for odorized natural gas, not a natural gas production well. Recent open-source reports of some type of oil being mobilized in the form of a mist or droplets due to conditions in the well, the adjacent formation, or SoCalGas's efforts to bring the well into control certainly raise the possibility of an OPA incident, but at this time we have not seen authoritative evidence of a discharge of oil to the waters of the United States. Accordingly, at the present time, it is our position that the OSLTF is NOT available to fund a federal response to the Aliso Canyon methane leak.

>

> We recognize that this is a dynamic situation and our position may change as more facts come to light. If EPA Region 9 can establish that a discharge of oil or a substantial threat of a discharge of oil to jurisdictional waters has occurred as a result of the methane leak or the efforts to control it, and EPA Region 9 determines it has to take action under its 311(c) response authority to mitigate the impacts of the oil discharge, then the OSLTF will be available for the FOSC's oil spill removal action. The FOSC will have to clearly establish the facts associated with the discharge (type of oil, quantity of oil, source of oil, impacted surface water bodies) and explain how the impacted waters are subject to CWA 311(c) response jurisdiction per the Rapanos guidance. The FOSC will also have to explain and document how the response for which OSLTF funding will be used is for the primary purpose of removing a discharge of oil to navigable waters, or adjoining shorelines or mitigating or preventing the substantial threat of such a discharge.

>

> I will be at the Region 9 RRT meeting this week if you wish to discuss this further. Please ensure you copy Tim Eastman (my boss) on any emails you send me related to the Aliso methane leak.

>

> Greg

>

> Greg Buie

> Regional Manager  
 > Western States and Pacific Region  
 > Case Management Division  
 > National Pollution Funds Center  
 > Direct: (202) 795-6073  
 > Fax: (202) 372-8357  
 > Mobile: (202) 494-9091 <----- Best way to reach me  
 > E-mail: [Gregory.W.Buie@uscg.mil](mailto:Gregory.W.Buie@uscg.mil)  
 >  
 > CG NATIONAL POLLUTION FUNDS CENTER  
 > ATTN GREG BUIE  
 > US COAST GUARD STOP 7605  
 > 2703 MARTIN LUTHER KING JR AVE SE  
 > WASHINGTON DC 20593-7605  
 >  
 >  
 >  
 > -----Original Message-----  
 > From: Meer, Daniel [<mailto:Meer.Daniel@epa.gov>]  
 > Sent: Friday, January 08, 2016 11:05 PM  
 > To: Buie, Gregory W CIV  
 > Cc: Wampler, David; Guria, Peter; Allen, HarryL  
 > Subject: [Non-DoD Source] Fwd: Aliso Canyon Methane Leak  
 >  
 > Greg - hope things are well. I meant to call you today. Hypothetical: if oily mist from a blown out natural gas well has an impact on surface water, could we open the fund for that?  
 >  
 > Thanks, Dan M  
 >  
 > Sent from my iPhone  
 > Daniel Meer  
 > Assistant Director  
 > Superfund Division  
 > USEPA, Region 9  
 >  
 > Begin forwarded message:  
 >  
 >  
 >  
 > From: "Wise, Robert" <[Wise.Robert@epa.gov](mailto:Wise.Robert@epa.gov)>  
 > Date: January 8, 2016 at 7:39:17 PM PST  
 > To: "Meer, Daniel" <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)>  
 > Subject: Re: Aliso Canyon Methane Leak  
 >  
 >  
 >  
 > The Fish cops are going to all me tomorrow and let me know what's going on. I told them I am interested in off site migration potential. Most likely drainage ends up in the Sepulveda Basin which turns into the LA River.  
 >  
 > Sent from my iPhone  
 >  
 > On Jan 8, 2016, at 7:08 PM, Meer, Daniel <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)> wrote:

Also this is an old oil reservoir so it is much more likely to be residual oil from the sandstone reservoir.

Sent from my iPhone  
Daniel Meer  
Assistant Director  
Superfund Division  
USEPA, Region 9

On Jan 8, 2016, at 4:11 PM, Wise, Robert <[Wise.Robert@epa.gov](mailto:Wise.Robert@epa.gov)> wrote:

Hi Dan,

> I was just contacted by the California Department of Fish and Wildlife concerning this incident. They received intel that the well is also releasing crude oil. One of their wardens has covertly documented the presence of a hillside adjacent to the well that is heavily impacted by oil. Apparently SoCal Gas did not want him taking pictures of this. In the last couple of nights with all of the rain, the activists (Brokovitch) had been telling the media that the well was releasing oil into the environment. They are going to send a team of wardens to the site tomorrow to investigate this oil release. Lt. Bryan Golhopher, who called me, told me he will contact me tomorrow with additional information on their findings. Bryan told me that the thought is that the oil is coming from another formation that the well is passing through. Right now, I am going to just gather intel from the DFW. If they confirm the presence of oil that may leave the site, then I think it's worth a look by us on Sunday. If there is oil being released from the well, that will provide a regulatory hook, I recommend we bring an OSC from Region 6 in who has wild well experience. I have some, but they have a lot more.

Happy End of the Week,

Robert Wise, CHMM, MSEnv.

Federal On-Scene Coordinator

USEPA Region 9 Emergency Response Section

562-889-2572

Wise.robert@epa.gov



>  
>  
> From: Meer, Daniel  
> Sent: Wednesday, January 06, 2016 4:33 PM  
> To: Moxley, Bret; Reiner, Chris; Weden, Christopher; Benson, Craig; Shane, Dan; Zuroski, Donn; MUSANTE, JASON; Rogow, Michelle; Nattis, Randy; Powell, Martin; Wise, Robert; Calanog, Steve; Dunkelman, Tom; Waldon, MARGARET; Robberson, Bill; Henry, Karen; Deyoe, Jeremy; Johnstone, Jeremy; Jones, bill; Richman, Lance; Wesling, Mary (Separated 12/31/15); Proboszcz, Angie; Lucas, Robert; Steiner, Cyntia; Albizu, Ramon; Lee, Barbara; Black, Ned; Boone, David; Bruck, Glenn; Temple, Celeste; Gill, Michael; Hiatt, Gerald; Levine, Herb; Samolis, Mark; Serda, Sophia; Stralka, Daniel; Terry, Robert; Wetmore, Cynthia  
> Subject: Aliso Canyon Methane Leak  
>  
>  
>  
>  
> Hi All  
>  
>  
>  
> Just thought I would provide an update on what we have been doing on Aliso Canyon recently. Bret and Jason did a site tour before the holidays and more recently we (Jeremy Johnstone, Kay Lawrence, Harry Allen, Letitia Moore and myself) have been mainly in a 'watchful waiting' mode. There are several calls each day with the incident command and we are preparing a short daily summary of on-site actions.  
>  
>  
>  
> Briefly, since October 23rd there has been an uncontrolled methane leak from a Southern California Gas Company natural gas storage facility in the old Aliso Canyon oil field, northern San Fernando Valley. SoCal Gas injects natural gas in abandoned sandstone oil reservoirs for storage and then extracts the gas for transmission. There are 115 wells in this facility and one of them blew out and is spewing out methane at a very high rate. Methane is a potent green house gas, approximately 10 times more potent than CO2. SoCal Gas is not sure of the root cause of this blowout but they suspect that the well casing may be damaged and the gas may be escaping through holes in the casing at a relatively shallow depth.  
>  
>  
>  
> SoCal Gas has tried to kill the well from the top by pumping in heavy fluids but those attempts have not been successful. They are drilling a relief well 24/7 and expect to complete the relief well by the end of February. In parallel to the relief well effort, they are proposing to put in a system to capture and flare off the methane escaping from the well. The kill operation from the relief well will pump in cement from the bottom of the blown out well. This technique has had a very high success ratio in the past, it just takes a long time to drill a relief well to 8500 feet and hit a small target.  
>  
>  
>  
> The regulatory structure is unusual. EPA only has authority under a rarely used section of the Clean Air Act - Section 303 - Emergency Powers. It is a sweeping imminent and substantial endangerment authority but has only been used as an absolute last resort, when a state has exhausted absolutely every other regulatory mechanism. Our normal 'go to' CAA authority, 112(r)(7) - Prevention of Accidental Releases - is excluded from applying to facilities that store natural gas that is incident to transportation, which is what Aliso Canyon is.  
>  
>  
>

> This incident is garnering a lot of media attention. Today Gov. Brown declared a state of emergency in Porter Ranch, the residential area closest to the well. Approximately 2500 people have been evacuated.

>

>

>

> We have recommended that DOT or EPA convene an incident specific NRT call to update our federal partners. This call is scheduled for Monday, 1/11.

>

>

>

> Happy New Year folks J No rest for the weary...

>

>

>

> Dan

>

>

>

> Daniel A. Meer, Assistant Director

>

> Superfund Division

>

> Emergency Response, Preparedness and Prevention Branch

>

> 415.972.3132 (O)

>

> 415.971.6792 (C)

>

>

>

## Proboszcz, Angie

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**From:** HarryL Allen <Allen.HarryL@epamail.epa.gov>  
**Sent:** Wednesday, January 13, 2016 4:23 PM  
**To:** Herrera, Angeles;Shaffer, Caleb;CHENG, CHRISTINA;Tenley, Clancy;Steiner, Cyntia;Barton, Dana;Tulis, Dana;Meer, Daniel;Minor, Dustin;Berg, Elizabeth;Manzanilla, Enrique;Weber, Fe;Grier, Tim;Irizarry, Gilberto;Ball, Harold;Allen, HarryL;Schumann, Jean;Deyoe, Jeremy;Chesnutt, John;Lyons, John;Moore, Kathi;Lawrence, Kathryn;Maldonado, Lewis;Henning, Loren;Lindsay, Nancy;Riveland, Nancy;Guria, Peter;Harris-Bishop, Rusty;R9-ORC3@epamail.epa.gov;R9-SFD9@epamail.epa.gov;Albizu, Ramon;Hiatt, Richard;Sherry Fielding  
**Cc:** Fong, Wendy  
**Subject:** Weekly Report of Emergency Response, Preparedness and Prevention Branch for the Week of 01/15/2016

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

### Highlights of Past Week

**Samoa Pulp Mill, Samoa, CA:** OSC Weden held an interagency meeting to review the current status of the site and discuss future actions. Participating entities included Humboldt County Health Dept. (CUPA), DTSC, North Coast RWQCB, AQMD, and the Humboldt Bay Harbor District. ERS plans to return to the site in the coming weeks to remove hazardous wastes that were profiled last week. This should complete ERS site work, estimated date of completion mid March (Weden 415-971-6962).

**Aliso Canyon Natural Gas Leak, Porter Ranch, CA:** We continue to participate in daily calls with SoCalGas, state and local agencies. On 5 January, Representative Brad Sherman sent a second letter to the top officials at EPA, PHMSA, FERC, SoCalGas, DOGGR, SCAQMD and the CPUC, that requests that the parties work together to stop the leak sooner than will otherwise be accomplished by the projected late February bottom-kill operation. This letter has not yet been controlled to the Region for response. On 7 January R9 led an incident specific RRT9 call on this incident, to provide situational awareness to a subset of federal and state agencies on the RRT, and on 11 January we participated in an NRT incident specific call and solicited technical expertise from other agencies in the areas of gas capture and well-killing. On 13 January EPA Lawrence met in LA with SoCalGas and agencies (including PHMSA) to discuss and provide input into the proposed gas capture project. Also on 13 January Sens. Boxer and Feinstein sent a letter to Administrator McCarthy, DOT Administrator Foxx and Attorney General Lynch requesting information about each agency's activities and authorities relating to the release. Gov. Brown's office has convened a meeting on 15 January Gov. Brown at Porter Ranch at which senior state agency representatives will speak. EPA and PHMSA have also been invited to participate. (J. Johnstone, x23499)

**Puna Geothermal Venture -** We issued a press release announcing the filing of the CA/FO, settling our enforcement action against PGV for violations of CAA §112(r) and which calls for PGV to pay a penalty of \$76,500 (J. Johnstone, x23499)

**Regional Response Team (RRT) Meeting:** The first RRT 9 meeting of 2016 was held on January 12-13 in the

Santa Barbara Emergency Operations Center. Topics included a discussion of EPA-USCG-CalOSPR Oil Spill Response Government Initiated Unannounced Exercises (GIUEs) coordination; Valley and Butte Fires Response; State Refinery Task Force Regulations; Avian Flu Impacts nationally and in California, etc. Tom Dunkelman, Donn Zuroski, Bret Moxley and Daniel Meer provided presentations at the meeting. (Lance Richman, 2-3022)

#### **Significant Items for Next Week**

#### **Press Stories, Significant Policy, Regulatory, or Legal Actions (2-3 Weeks Out)**

#### **Grant Announcements**

#### **Legislative Engagement**

#### **Travel, Public/National Meetings, and Speaking Engagement for Division Director**

**Ammonia Refrigeration Operator Training** - Johnstone will attend Ammonia Refrigeration Operator Training offered by the Garden City Ammonia Program in Bakersfield CA Feb 1-4.

#### **30-60 Day Outlook**

#### **Other Information**

#### **Miscellaneous Tech Support:**

1. Recycling: Gill connected a member of the community (Lizzie Ayers) with Timonie Hood from RCRA, to assist with questions and information resources about recycling.
2. Navajo Nation: Gill worked with RPM Gaelle Glickfield to clarify an aerial photo request for the Cove Sites within the Navajo Nation.

3. TechHub: Gill reviewed and provided comments to Greg Gervais on some “Guiding Principles” as part of the TechHub work, which is a compilation of resources by OSRTI to help Superfund staff be aware of internal technical resources.

5. PFOA: Gill shared a NY Times article about PFOA compounds with other workgroup members on the PFOA/PFOS issue paper under the Engineering Forum.

**Internal to Region 9**

**Internal to Division**

**Confidential Information**

## Proboszcz, Angie

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**From:** Glenn, William  
**Sent:** Friday, January 22, 2016 1:21 PM  
**To:** Meer, Daniel;COHEN, Deborra;Keener, Bill;Nazmi, Niloufar  
**Cc:** Mogharabi, Nahal;Zito, Kelly;Johnstone, Jeremy;Lawrence, Kathryn;Gaudario, Abigail  
**Subject:** RE: Porter Ranch Alyso Canyon Methane Gas Leak

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hi Dan,

That's our goal – my thought was to include you just so you (or someone in the program) would have awareness of the kinds of requests that are coming to the Agency. If you'd rather, we can just let you know about the stickiest ones.

Bill

---

Bill Glenn  
Chief, Web + Internal Communications  
Office of Public Affairs  
U.S. EPA, Pacific Southwest  
[glenn.william@epa.gov](mailto:glenn.william@epa.gov) / (415) 947-4254

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**From:** Meer, Daniel  
**Sent:** Friday, January 22, 2016 1:04 PM  
**To:** Glenn, William <[Glenn.William@epa.gov](mailto:Glenn.William@epa.gov)>; COHEN, Deborra <[Cohen.Deborra@epa.gov](mailto:Cohen.Deborra@epa.gov)>; Keener, Bill <[Keener.Bill@epa.gov](mailto:Keener.Bill@epa.gov)>; Nazmi, Niloufar <[Nazmi.Niloufar@epa.gov](mailto:Nazmi.Niloufar@epa.gov)>  
**Cc:** Mogharabi, Nahal <[MOGHARABI.NAHAL@EPA.GOV](mailto:MOGHARABI.NAHAL@EPA.GOV)>; Zito, Kelly <[ZITO.KELLY@EPA.GOV](mailto:ZITO.KELLY@EPA.GOV)>; Johnstone, Jeremy <[Johnstone.Jeremy@epa.gov](mailto:Johnstone.Jeremy@epa.gov)>; Lawrence, Kathryn <[Lawrence.Kathryn@epa.gov](mailto:Lawrence.Kathryn@epa.gov)>; Gaudario, Abigail <[Gaudario.Abigail@epa.gov](mailto:Gaudario.Abigail@epa.gov)>  
**Subject:** RE: Porter Ranch Alyso Canyon Methane Gas Leak

Hi All – I would ask that you vet the inquiries to see if they can be handled by OPA directly. OPA can steer people to FEMA, LA County Public Health or other agencies as easy as we can. Thanks, Dan

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

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**From:** Glenn, William  
**Sent:** Friday, January 22, 2016 12:42 PM  
**To:** COHEN, Deborra; Keener, Bill; Nazmi, Niloufar  
**Cc:** Mogharabi, Nahal; Meer, Daniel; Zito, Kelly  
**Subject:** RE: Porter Ranch Alyso Canyon Methane Gas Leak

Thanks, Deb. I'm thinking as issues arise, it might be a good idea to also routinely loop in Dan Meer as well.

Here are those links you sent to Dan, in case they're useful for folks. I've also included the statement from a couple weeks back that I believe we've been using as a basis for responses to public inquiries – just in case anyone is aware of any new information we should be including.

<http://www.caloes.ca.gov/ICESite/Pages/Aliso-Canyon.aspx> California Office of Emergency Services

<http://www.aqmd.gov/home/regulations/compliance/aliso-canyon-update> South Coast Air Quality Mgt District

[http://oehha.ca.gov/public\\_info/emergency/alisocanyon.html](http://oehha.ca.gov/public_info/emergency/alisocanyon.html) California Office of Environmental Health Hazard Assessment

[http://oehha.ca.gov/public\\_info/emergency/pdf/AlisoCanyonPorterRanchFAQ01152016.pdf](http://oehha.ca.gov/public_info/emergency/pdf/AlisoCanyonPorterRanchFAQ01152016.pdf) California Office of Environmental Health Hazard Assessment

<http://content.govdelivery.com/accounts/USNLMTEH/bulletins/1307102?reffrom=share> National Library of Medicine compilation of health and toxicological data

### **U.S. EPA involvement in the Aliso Canyon natural gas leak response**

California state and local agencies are on the forefront of the response to the Aliso Canyon natural gas leak. They include the California Office of Emergency Services (Cal OES), California Division of Oil, Gas and Geothermal Resources (DOGGR), the South Coast Air Quality Management District, the County of Los Angeles Fire and Public Health Departments, the City of Los Angeles, California Public Utilities Commission (CPUC), California Air Resources Board (CARB), California Energy Commission (CEC), Division of Occupational Safety and Health (Cal/OSHA), and the Office of Environmental Health Hazard Assessment (OEHHA). Please see the California Office of Emergency Services website for the latest information: (<http://www.caloes.ca.gov/ICESite/Pages/Aliso-Canyon.aspx>).

The U.S. Environmental Protection Agency is participating in daily operational calls with these local and state regulators and Southern California Gas Company to stay abreast of developments in controlling the gas release and assisting local residents. On Dec. 18, U.S. EPA Region 9 sent a federal Clean Air Act information request letter to Southern California Gas Company for additional data and documents related to the facility and its operation. EPA is currently reviewing the information submitted and expects to receive additional information from the company in coming days. After completing its review of this information and in consultation with the state and local regulators already active on the scene, EPA will determine the appropriate next steps.

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Bill Glenn  
Chief, Web + Internal Communications  
Office of Public Affairs  
U.S. EPA, Pacific Southwest  
[glenn.william@epa.gov](mailto:glenn.william@epa.gov) / (415) 947-4254

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**From:** COHEN, Deborra

**Sent:** Friday, January 22, 2016 12:32 PM

**To:** Keener, Bill <[Keener.Bill@epa.gov](mailto:Keener.Bill@epa.gov)>; Nazmi, Niloufar <[Nazmi.Niloufar@epa.gov](mailto:Nazmi.Niloufar@epa.gov)>; Glenn, William <[Glenn.William@epa.gov](mailto:Glenn.William@epa.gov)>

**Cc:** Mogharabi, Nahal <[MOGHARABI.NAHAL@EPA.GOV](mailto:MOGHARABI.NAHAL@EPA.GOV)>

**Subject:** RE: Porter Ranch Alyso Canyon Methane Gas Leak

Hi, Dan Meer said he would respond. I didn't cc Bill Keener or Nahal on my email to Dan.  
Bill K, Nahal, Niloufar and Bill G – in general, should I include all 4 of you in emails pertaining to Porter Ranch?  
Bill K and Nahal, do you want me to forward the email I sent to Dan Meer? It contained a list of several website links to the resources that have been established by South Coast, Cal OES, OEHA, NLM.

---

**Deborra Cohen**

Director, Environmental Information Center / Library

[Cohen.Deborra@epa.gov](mailto:Cohen.Deborra@epa.gov) / 415-972-3655

<http://www.epa.gov/region9/library>

U.S. EPA Region 9 Library / 75 Hawthorne St. / San Francisco, CA 94105

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**From:** Keener, Bill

**Sent:** Friday, January 22, 2016 12:18 PM

**To:** Nazmi, Niloufar <[Nazmi.Niloufar@epa.gov](mailto:Nazmi.Niloufar@epa.gov)>; COHEN, Deborra <[Cohen.Deborra@epa.gov](mailto:Cohen.Deborra@epa.gov)>; Glenn, William <[Glenn.William@epa.gov](mailto:Glenn.William@epa.gov)>

**Cc:** Mogharabi, Nahal <[MOGHARABI.NAHAL@EPA.GOV](mailto:MOGHARABI.NAHAL@EPA.GOV)>

**Subject:** RE: Porter Ranch Alyso Canyon Methane Gas Leak

And looping in Nahal for situational awareness.

---

**Bill Keener**

Office of Public Affairs

U.S. EPA - Region 9

San Francisco, CA

Phone: (415) 972-3940

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**From:** Nazmi, Niloufar

**Sent:** Friday, January 22, 2016 7:44 AM

**To:** COHEN, Deborra <[Cohen.Deborra@epa.gov](mailto:Cohen.Deborra@epa.gov)>; Glenn, William <[Glenn.William@epa.gov](mailto:Glenn.William@epa.gov)>

**Cc:** Keener, Bill <[Keener.Bill@epa.gov](mailto:Keener.Bill@epa.gov)>

**Subject:** Fwd: Porter Ranch Alyso Canyon Methane Gas Leak

This is a citizen inquiry I was referred to us from headquarters. If I should be forwarding it to someone else please let me know.

Niloufar

---

**Niloufar Nazmi**

U.S. Environmental Protection Agency

Desk: [415.972.3684](tel:415.972.3684) | Mobile: 415.328.1143 |

Begin forwarded message:

**From:** "Dennis, Allison" <[Dennis.Allison@epa.gov](mailto:Dennis.Allison@epa.gov)>

**Date:** January 22, 2016 at 7:10:16 AM PST

**To:** "Nazmi, Niloufar" <[Nazmi.Niloufar@epa.gov](mailto:Nazmi.Niloufar@epa.gov)>

**Subject:** FW: Porter Ranch Alyso Canyon Methane Gas Leak



Hi Nilofaur,

Can you get this citizen inquiry to the right person in r9?

-----Original Message-----

From: Wieder, Jessica

Sent: Friday, January 22, 2016 10:07 AM

To: Dennis, Allison <[Dennis.Allison@epa.gov](mailto:Dennis.Allison@epa.gov)>

Cc: Egidi, Philip <[Egidi.Philip@epa.gov](mailto:Egidi.Philip@epa.gov)>

Subject: FW: Porter Ranch Alyso Canyon Methane Gas Leak

Allison,

Can you forward this public question to the appropriate contact in Region 9? It was sent to one of my radiation technical experts. Thank you. - Jess

From: Roberta [REDACTED]

Sent: Saturday, January 16, 2016 9:40 PM

To: Egidi, Philip <[Egidi.Philip@epa.gov](mailto:Egidi.Philip@epa.gov)>

Subject: Porter Ranch Alyso Canyon Methane Gas Leak

Egidi, I emailed H.E.E.T. and they referred me to you.

I emailed them to thank them for coming to the San Fernando Valley area to take readings of the methane gas that is leaking from Porter Ranch and posting the video. We are concerned residents of the San Fernando Valley, trying to gather all the information we can, since governmental authorities seem to have their lips sewn shut.

I downloaded the air quality readings from the So Cal Gas website, but do not have the scientific background to decipher the information. Is there anyone there that can help us with that?

Or, can you give us information as to how to protect ourselves, (flammable gas detectors, NBC gas masks, access to number of animal and human illnesses and or deaths?).

We have been awaiting to hear back from our friend Caroline regarding autopsy/toxicology results of her cousin Gwen, who lived in Porter Ranch and was VERY ILL during the holiday. Gwen spent Christmas and New Year with her cousin Caroline in Big Bear and displayed symptoms of nausea, vomiting, headaches and hot and cold flashes. On January 1st Caroline noticed her cousin stopped breathing and had to give her CPR. Caroline called the ambulance and Gwen died either on the way to the hospital or after she got there.

Please help us in any way you can!

Thank You, Roberta Griego  
[REDACTED]

Jessica Wieder  
U.S. EPA  
Radiation Protection Program  
Center for Radiation Information and Outreach  
w: 202-343-9201  
c: 202-420-9353

---

From: Egidi, Philip  
Sent: Friday, January 22, 2016 9:52 AM  
To: Wieder, Jessica  
Cc: Peake, Tom; Schultheisz, Daniel  
Subject: Re: Porter Ranch Alyso Canyon Methane Gas Leak

To my knowledge, it has not been passed along yet...

PVE

---

From: Wieder, Jessica  
Sent: Friday, January 22, 2016 9:25 AM  
To: Egidi, Philip  
Cc: Peake, Tom; Schultheisz, Daniel  
Subject: Re: Porter Ranch Alyso Canyon Methane Gas Leak

Just got back from travel. Has this been passed along? If not, let me know and I will send it to the region.

Jess

Jessica Wieder  
U.S. Environmental Protection Agency  
Radiation Protection Program  
202-343-9201  
m: 202-420-9353

Sent from my iPhone

On Jan 19, 2016, at 9:14 AM, Egidi, Philip  
<[Egidi.Philip@epa.gov](mailto:Egidi.Philip@epa.gov)<<mailto:Egidi.Philip@epa.gov>>> wrote:

Not sure who to hand this off to, IED or the Region?

Discuss.

PVE

Philip Egidi

Environmental Scientist

U.S. Environmental Protection Agency

Radiation Protection Division

Washington, DC

(202) 343-9186 (work)

(970) 209-2885 (Cell)

"The health of the people is the highest law."

Cicero (106 - 43 BC)

From: Roberta [REDACTED]  
Sent: Saturday, January 16, 2016 9:40 PM  
To: Egidi, Philip <[Egidi.Philip@epa.gov](mailto:Egidi.Philip@epa.gov)<<mailto:Egidi.Philip@epa.gov>>>  
Subject: Porter Ranch Alyso Canyon Methane Gas Leak

Egidi, I emailed H.E.E.T. and they referred me to you.

I emailed them to thank them for coming to the San Fernando Valley area to take readings of the methane gas that is leaking from Porter Ranch and posting the video. We are concerned residents of the San Fernando Valley, trying to gather all the information we can, since governmental authorities seem to have their lips sewn shut.

I downloaded the air quality readings from the So Cal Gas website, but do not have the scientific background to decipher the information. Is there anyone there that can help us with that?

Or, can you give us information as to how to protect ourselves, (flammable gas detectors, NBC gas masks, access to number of animal and human illnesses and or deaths?).

We have been awaiting to hear back from our friend Caroline regarding autopsy/toxicology results of her cousin Gwen, who lived in Porter Ranch and was VERY ILL during the holiday. Gwen spent Christmas and New Year with her cousin Caroline in Big Bear and displayed symptoms of nausea, vomiting, headaches and hot and cold flashes. On January 1st Caroline noticed her cousin stopped breathing and had to give her CPR. Caroline called the ambulance and Gwen died either on the way to the hospital or after she got there.

Please help us in any way you can!

Thank You, Roberta Griego



## Proboszcz, Angie

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**From:** Glenn, William  
**Sent:** Wednesday, January 13, 2016 5:08 PM  
**To:** Keener, Bill;Zito, Kelly;Gaudario, Abigail;R9 Supervisors  
**Cc:** Barkett, Bonnie;Maier, Brent;Calvino, Maria Soledad;Higuchi, Dean;Reyes, Deldi;PerezSullivan, Margot;Mogharabi, Nahal;Nazmi, Niloufar;Harris-Bishop, Rusty;Hudnall, Patricia;Ford, Margaret;Henderson, Alita;COHEN, Deborra;Pratt, Kristen;Meltzer, Kathy;Engelman, Alexa;Hood, Timonie;Blazej, Nova;Stollman, Scott;Amato, Paul;Schmidt, David;Skadowski, Suzanne;Rao, Kate;Ty, Fatima;Kao, Jessica;Huitric, Michele;Karlson, Kristine  
**Subject:** End of Day -- January 13, 2016  
  
**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

## MEDIA

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**LA Daily News:** Ran Op-Ed on Trash Policy from Jared in today's paper and online.

**Cleaning up the Pacific Garbage Patch:** <http://www.dailynews.com/opinion/20160113/how-californias-new-trash-control-policy-can-help-shrink-the-pacific-garbage-patch>. WATER. CLOSED. (v). Nahal Mogharabi.

The following press release was issued today: [U.S. EPA Approves California's New Trash Control Policy](#). WATER. CLOSED. Nahal Mogharabi.

## WEB

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### Social Media:

**Children's Health** – At the request of headquarters, shared a post to our [Facebook](#) page about our commitment to children's health and linked to our editorial in the National Institute of Health's Environmental Health Perspectives newsletter, [Renewing the Federal Commitment to Advance Children's Health](#).

### Web Updates:

**California Air Actions** – Posted a link to the Federal Register notice for the South Coast Reclassification as Serious Nonattainment for 2006 PM2.5 to the [News and Events page](#).

### Online Updates:

**Transit Subsidy FAQs** – Posted an updated version of the [Transit Subsidy FAQ](#).

**Building Project** – Added the latest progress report / photos to the [Construction page](#) in the Building Project site.

## CONGRESSIONAL & INTERGOVERNMENTAL

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**Sen. Barbara Boxer and Sen. Dianne Feinstein:** A letter sent to DOT Secretary Anthony Fox, EPA Administrator Gina McCarthy, and DOJ Attorney General Loretta Lynch regarding the Aliso Canyon Natural Gas Storage Facility uncontrolled leak was shared with RA Blumenfeld by Senate Environment and Public Works Committee staffer Jason Albritton. The letter requests that EPA, DOT, and provide the Senators with the following information: 1) An update on actions taken

by each of your agencies to date, including any direction or advice you are providing to State agencies and Southern California Gas Company on the response; 2) A description of how state agencies have exercised any delegated Federal authorities in relation to this natural gas leak and a description of your oversight of the use of these Federal authorities; 3) A legal analysis of any Federal authorities that could apply to this incident and storage fields in general and how your agencies have exercised these authorities to date; and 4) A technical analysis of whether Southern California Gas Company could more quickly reduce the gas stored in the facility to mitigate the uncontrolled leak of natural gas. A copy of the letter is available upon request. This letter has been controlled to Region IX, however, OCIR is working directly with the Senators offices' and whether a written response is needed is still under discussion.

**OCIR Request for One-Pager on Aliso Canyon:** Brent Maier shared a one-pager per OCIR's request on Aliso Canyon prepared by our Office of Regional Counsel and Superfund Division for the Administrator's briefing book for an upcoming hearing before the House Agricultural Committee.

**Rep. Mark Amodei (R-NV-3):** Brent Maier reached out to Jason Riederer earlier today who is the Legislative Director for Congressman Mark Amodei regarding their interest in setting up a briefing with the Congressman on Anaconda Copper Mine Site. Jason responded and shared with us a list of 11 specific questions that he would like answered before a briefing is scheduled. They would like to schedule a call or in-person briefing before January 27<sup>th</sup> if possible. Brent will be working with the Congressman's scheduler, Rachel Provost, to schedule a day/time that will work.

**Rep. Steve Knight (R-CA-25):** The Congressman wrote an opinion column in today's LA Daily News regarding his efforts to address the Aliso Canyon/Porter Ranch natural gas leak. Congressman Steve Knight, R-Santa Clarita, represents California's 25th District, including Porter Ranch. Link to opinion column:

<http://www.dailynews.com/opinion/20160112/porter-ranch-needs-leadership-not-politics-steve-knight>

**WOTUS:** The House voted today to overturn the WOTUS rule from the Environmental Protection Agency that asserts federal authority over small waterways. The House passed the resolution 253-166 Wednesday, with 12 Democrats supporting it. Rep. Chris Smith (N.J.) was the only Republican to vote against the measure. The measure is now headed to President Obama's desk; he has promised to veto it. The Clean Water Rule is not currently being enforced because of a federal court ruling that blocked its implementation while it is being litigated.

**Congressional Outreach on EPA Approval of New California Trash Control Policy:** Brent Maier shared today's press release with Congressional staff for the entire California Congressional delegation regarding EPA recently approving the State Water Resources Control Board's new water quality standards for trash in California's waters. The standards are part of the state's new Trash Control Policy, designed to keep trash out of streams, lakes, bays, estuaries, coastal and ocean waters in California to protect people and the environment.

**Sen. Martin Heinrich (D-NM):** A final draft response to the incoming letter from Sen. Martin Heinrich regarding uranium cleanup operations at Northeast Churchrock Mine, Quivira/Kerr-McGee Mine, and the UNC Church Rock Mill is being finalized for concurrence chain for RA signature. Brent Maier extended the due date of this letter until Thursday, January 15, 2016 to provide time for final review and signature.

**Rep. Brad Sherman (D-CA-30):** A final draft EPA response to the incoming letter from Congressman Sherman on Aliso Canyon has been drafted by ORC and shared with PHMSA. This will be a joint response with PHMSA and FERC once a draft is ready to send to OCIR's Carolyn Levine for their assistance and coordination of working with PHMSA and FERC to finalize a draft that will be signed by EPA Administrator Gina McCarthy along with PHMSA, and FERC.

**Rep. David Valadao (R-CA-21):** Rep. David Valadao yesterday introduced legislation to approve a contentious deal between the federal government and the powerhouse Westlands Water District resolving a long-running dispute over drainage water and forgiving the district's \$350 million debt to federal taxpayers. Under the [agreement](#), which was filed in September in U.S. District Court for the Eastern District of California, Westlands will assume responsibility for its drainage issues and drop its suit against Interior in exchange for forgiveness of its outstanding debt from the construction of the CVP itself -- a value of about \$350 million. The measure, despised by environmentalists and northern

Californians, only stands to complicate efforts to move a drought bill for the Golden State. - [H.R. 4366: To affirm an agreement between the United States and Westlands Water District dated September 15, 2015, and for other purposes.](#) This bill was referred to the House Committee on Natural Resources which will consider it before sending it to the House floor for consideration.

**Region IX Hot Issues for Upcoming U.S. Conference of Mayors Winter Meeting:** Brent Maier compiled and sent forward to OCIR's Arnita Hannon some Region IX Hot Issues for a select group of Region IX Mayors that are members of the Environment Committee and who will be meeting in conjunction with the U.S. Conference of Mayors Winter Meeting on January 20 – 22, 2016. The Hot Issues were for the following Mayors and included: Mayor Carolyn Goodman, Las Vegas, NV - Making a Visible Difference in Communities (MVD); Mayor Ashley Swearengin, Fresno, CA - Strong Cities, Strong Communities (SC2-Fresno).

#### **Legislative Action:**

January 11, 2016 - [H.R. 653: FOIA Act](#) - This bill's text for status *Passed the House (Engrossed)* (Jan 11, 2016) is now available.

January 11, 2016 - [H.R. 1155: SCRUB Act of 2016](#) - Searching for and Cutting Regulations that are Unnecessarily Burdensome Act of 2016 (SCRUB). This bill's text for status *Referred to Senate Committee* (January 11, 2016) is now available.

January 11, 2016 - [H.R. 3231: Federal Intern Protection Act of 2015](#) - This bill's text for status *Passed the House (Engrossed)* (January 11, 2016) is now available.

January 11, 2016 - [H.R. 4359: Administrative Leave Reform Act](#) - This bill's text is now available.

January 11, 2016 - [H.R. 4360: Official Personnel File Enhancement Act](#) - This bill's text is now available.

January 12, 2016 - [H.R. 1644: STREAM Act](#) - Supporting Transparent Regulatory and Environmental Actions in Mining Act (STREAM). This bill's text for status *Passed the House (Engrossed)* (January 12, 2016) is now available.

January 12, 2016 - [H.R. 4358: Senior Executive Service Accountability Act](#) - Last Action: Ordered to be reported by Voice Vote. The committees assigned to this bill sent it to the House or Senate as a whole for consideration on January 12, 2016.

## Proboszcz, Angie

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**From:** Dunkelman, Tom  
**Sent:** Wednesday, January 06, 2016 5:41 PM  
**To:** Meer, Daniel  
**Subject:** Re: Aliso Canyon Methane Leak

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Thanks for the info. I am planning to do the ERS update at the RRT meeting next week. I am pretty sure you are going to be there. I was thinking I could save some time within that time slot for you to give a brief update on this issue.

Sent from my iPad

On Jan 6, 2016, at 4:33 PM, Meer, Daniel <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)> wrote:

Hi All

Just thought I would provide an update on what we have been doing on Aliso Canyon recently. Bret and Jason did a site tour before the holidays and more recently we (Jeremy Johnstone, Kay Lawrence, Harry Allen, Letitia Moore and myself) have been mainly in a 'watchful waiting' mode. There are several calls each day with the incident command and we are preparing a short daily summary of on-site actions.

Briefly, since October 23<sup>rd</sup> there has been an uncontrolled methane leak from a Southern California Gas Company natural gas storage facility in the old Aliso Canyon oil field, northern San Fernando Valley. SoCal Gas injects natural gas in abandoned sandstone oil reservoirs for storage and then extracts the gas for transmission. There are 115 wells in this facility and one of them blew out and is spewing out methane at a very high rate. Methane is a potent green house gas, approximately 10 times more potent than CO<sub>2</sub>. SoCal Gas is not sure of the root cause of this blowout but they suspect that the well casing may be damaged and the gas may be escaping through holes in the casing at a relatively shallow depth.

SoCal Gas has tried to kill the well from the top by pumping in heavy fluids but those attempts have not been successful. They are drilling a relief well 24/7 and expect to complete the relief well by the end of February. In parallel to the relief well effort, they are proposing to put in a system to capture and flare off the methane escaping from the well. The kill operation from the relief well will pump in cement from the bottom of the blown out well. This technique has had a very high success ratio in the past, it just takes a long time to drill a relief well to 8500 feet and hit a small target.

The regulatory structure is unusual. EPA only has authority under a rarely used section of the Clean Air Act – Section 303 – Emergency Powers. It is a sweeping imminent and substantial endangerment authority but has only been used as an absolute last resort, when a state has exhausted absolutely every other regulatory mechanism. Our normal 'go to' CAA authority, 112(r)(7) – Prevention of Accidental Releases – is excluded from applying to facilities that store natural gas that is incident to transportation, which is what Aliso Canyon is.

This incident is garnering a lot of media attention. Today Gov. Brown declared a state of emergency in Porter Ranch, the residential area closest to the well. Approximately 2500 people have been evacuated.



We have recommended that DOT or EPA convene an incident specific NRT call to update our federal partners. This call is scheduled for Monday, 1/11.

Happy New Year folks 😊 No rest for the weary...

Dan

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

[REDACTED]

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[REDACTED]

-----Original Message-----

From: Meer, Daniel

Sent: Sunday, January 10, 2016 8:04 PM

To: [Gregory.W.Buie@uscg.mil](mailto:Gregory.W.Buie@uscg.mil)

Cc: Wampler, David <[Wampler.David@epa.gov](mailto:Wampler.David@epa.gov)>; Guria, Peter <[Guria.Peter@epa.gov](mailto:Guria.Peter@epa.gov)>; Allen, HarryL <[Allen.HarryL@epa.gov](mailto:Allen.HarryL@epa.gov)>; Eastman, Timothy G CIV <[Timothy.G.Eastman@uscg.mil](mailto:Timothy.G.Eastman@uscg.mil)>; Richard.R.Boes@uscg.mil; Robert.N.Hildebrand@uscg.mil; Steven.D.Poole@uscg.mil; Helmlinger, Andrew <[Helmlinger.Andrew@epa.gov](mailto:Helmlinger.Andrew@epa.gov)>; Minor, Dustin <[Minor.Dustin@epa.gov](mailto:Minor.Dustin@epa.gov)>; Wise, Robert <[Wise.Robert@epa.gov](mailto:Wise.Robert@epa.gov)>; Benson, Craig <[Benson.Craig@epa.gov](mailto:Benson.Craig@epa.gov)>  
Subject: Re: Aliso Canyon Methane Leak

Thanks Greg. We can discuss further on Tuesday at the RRT9 meeting.

Dan

Sent from my iPhone  
Daniel Meer  
Assistant Director  
Superfund Division

> On Jan 10, 2016, at 7:16 PM, Buie, Gregory W CIV <[Gregory.W.Buie@uscg.mil](mailto:Gregory.W.Buie@uscg.mil)> wrote:

>

> Dan,

>

> I am not going to answer your hypothetical question as you posed it; instead I will state our position regarding natural gas.

>

> Natural gas (aka methane) is not an oil. Response to a discharge or substantial threat of discharge of natural gas is not an oil response under FWPCA and is not funded from the OSLTF. However, oil may be present in some amounts when there is a natural gas incident, such as a leak, fire, or explosion from certain natural gas wells; usually production wells where there is natural gas condensate present. Such oil may discharge to navigable waters or adjoining shorelines or there may be a substantial threat of such a discharge. Therefore, while a response to a natural gas incident will in general not be a response under the FWPCA for which OSLTF funding is available, FOSC response to the discharge of oil to navigable waters or adjoining shorelines, or the substantial threat of such a discharge, may be funded from the OSLTF. When confronted with a natural gas incident, FOSCs should explain and document how the response for which OSLTF funding will be used is for the primary purpose of removing a discharge of oil to navigable waters, or adjoining shorelines or mitigating or preventing the substantial threat of such a discharge.

>

> We have been monitoring the situation with the Aliso Canyon methane leak for several weeks now. We know that the leaking well is a storage well for odorized natural gas, not a natural gas production well. Recent open-source reports of some type of oil being mobilized in the form of a mist or droplets due to conditions in the well, the adjacent formation, or SoCalGas's efforts to bring the well into control certainly raise the possibility of an OPA incident, but at this time we have not seen authoritative evidence of a discharge of oil to the waters of the United States. Accordingly, at the present time, it is our position that the OSLTF is NOT available to fund a federal response to the Aliso Canyon methane leak.

>

> We recognize that this is a dynamic situation and our position may change as more facts come to light. If EPA Region 9 can establish that a discharge of oil or a substantial threat of a discharge of oil to jurisdictional waters has occurred as a result of the methane leak or the efforts to control it, and EPA Region 9 determines it has to take action under its 311(c) response authority to mitigate the impacts of the oil discharge, then the OSLTF will be available for the FOSC's oil spill removal action. The FOSC will have to clearly establish the facts associated with the discharge (type of oil, quantity of oil, source of oil, impacted surface water bodies) and explain how the impacted waters are subject to CWA 311(c) response jurisdiction per the Rapanos guidance. The FOSC will also have to explain and document how the response for which OSLTF funding will be used is for the primary purpose of removing a discharge of oil to navigable waters, or adjoining shorelines or mitigating or preventing the substantial threat of such a discharge.

>

> I will be at the Region 9 RRT meeting this week if you wish to discuss this further. Please ensure you copy Tim Eastman (my boss) on any emails you send me related to the Aliso methane leak.

>

> Greg

>

> Greg Buie

> Regional Manager

> Western States and Pacific Region

> Case Management Division

> National Pollution Funds Center

> Direct: (202) 795-6073

> Fax: (202) 372-8357

> Mobile: (202) 494-9091 <----- Best way to reach me

> E-mail: [Gregory.W.Buie@uscg.mil](mailto:Gregory.W.Buie@uscg.mil)

>

> CG NATIONAL POLLUTION FUNDS CENTER

> ATTN GREG BUIE

> US COAST GUARD STOP 7605

> 2703 MARTIN LUTHER KING JR AVE SE

> WASHINGTON DC 20593-7605

>

>

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> -----Original Message-----

> From: Meer, Daniel [<mailto:Meer.Daniel@epa.gov>]

> Sent: Friday, January 08, 2016 11:05 PM

> To: Buie, Gregory W CIV

> Cc: Wampler, David; Guria, Peter; Allen, HarryL

> Subject: [Non-DoD Source] Fwd: Aliso Canyon Methane Leak

>

> Greg - hope things are well. I meant to call you today. Hypothetical: if oily mist from a blown out natural gas well has an impact on surface water, could we open the fund for that?

>

> Thanks, Dan M

>

> Sent from my iPhone

> Daniel Meer

> Assistant Director

> Superfund Division

> USEPA, Region 9

>

> Begin forwarded message:

>

>

>

> From: "Wise, Robert" <[Wise.Robert@epa.gov](mailto:Wise.Robert@epa.gov)>

> Date: January 8, 2016 at 7:39:17 PM PST

> To: "Meer, Daniel" <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)>

> Subject: Re: Aliso Canyon Methane Leak

>

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>

> The Fish cops are going to all me tomorrow and let me know what's going on. I rod them I am interested in off site migration potential. Most likely drainage ends up in the Sepulveda Basin which turns into the LA River.

>

> Sent from my iPhone

>

> On Jan 8, 2016, at 7:08 PM, Meer, Daniel <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)> wrote:

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>

>

> Also this is an old oil reservoir so it is much more likely to be residual oil from the sandstone reservoir.

>

> Sent from my iPhone

> Daniel Meer

> Assistant Director

> Superfund Division

> USEPA, Region 9

>

> On Jan 8, 2016, at 4:11 PM, Wise, Robert <[Wise.Robert@epa.gov](mailto:Wise.Robert@epa.gov)> wrote:

>

>

>

> Hi Dan,

>

>

>

> I was just contacted by the California Department of Fish and Wildlife concerning this incident. They received intel that the well is also releasing crude oil. One of their wardens has covertly documented the presence of a hillside adjacent to the well that is heavily impacted by oil. Apparently SoCal Gas did not want him taking pictures of this. In the last couple of nights with all of the rain, the activists (Brokovitch) had been telling the media that the well was releasing oil into the environment. They are going to send a team of wardens to the site tomorrow to investigate this oil release. Lt. Bryan Golhopher, who called me, told me he will contact me tomorrow with additional information on their findings. Bryan told me that the thought is that the oil is coming from another formation that the well is passing through. Right now, I am going to just gather intel from the DFW. If they confirm the presence of oil that may leave the site, then I think it's worth a look by us on Sunday. If there is oil being released from the well, that will provide a regulatory hook, I recommend we bring an OSC from Region 6 in who has wild well experience. I have some, but they have a lot more.

>

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> Happy End of the Week,

>

>

>

> Robert Wise, CHMM, MSEnv.

>

> Federal On-Scene Coordinator

>

> USEPA Region 9 Emergency Response Section

>

> 562-889-2572

>

> [Wise.robert@epa.gov](mailto:Wise.robert@epa.gov)

>

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> From: Meer, Daniel

> Sent: Wednesday, January 06, 2016 4:33 PM

> To: Moxley, Bret; Reiner, Chris; Weden, Christopher; Benson, Craig; Shane, Dan; Zuroski, Donn; MUSANTE, JASON; Rogow, Michelle; Nattis, Randy; Powell, Martin; Wise, Robert; Calanog, Steve; Dunkelman, Tom; Waldon, MARGARET; Robberson, Bill; Henry, Karen; Deyoe, Jeremy; Johnstone, Jeremy; jones, bill; Richman, Lance; Wesling, Mary (Separated 12/31/15); Proboszcz, Angie; Lucas, Robert; Steiner, Cyntia; Albizu, Ramon; Lee, Barbara; Black, Ned;

Boone, David; Bruck, Glenn; Temple, Celeste; Gill, Michael; Hiatt, Gerald; Levine, Herb; Samolis, Mark; Serda, Sophia; Stralka, Daniel; Terry, Robert; Wetmore, Cynthia

> Subject: Aliso Canyon Methane Leak

> Hi All

> Just thought I would provide an update on what we have been doing on Aliso Canyon recently. Bret and Jason did a site tour before the holidays and more recently we (Jeremy Johnstone, Kay Lawrence, Harry Allen, Letitia Moore and myself) have been mainly in a 'watchful waiting' mode. There are several calls each day with the incident command and we are preparing a short daily summary of on-site actions.

> Briefly, since October 23rd there has been an uncontrolled methane leak from a Southern California Gas Company natural gas storage facility in the old Aliso Canyon oil field, northern San Fernando Valley. SoCal Gas injects natural gas in abandoned sandstone oil reservoirs for storage and then extracts the gas for transmission. There are 115 wells in this facility and one of them blew out and is spewing out methane at a very high rate. Methane is a potent green house gas, approximately 10 times more potent than CO2. SoCal Gas is not sure of the root cause of this blowout but they suspect that the well casing may be damaged and the gas may be escaping through holes in the casing at a relatively shallow depth.

> SoCal Gas has tried to kill the well from the top by pumping in heavy fluids but those attempts have not been successful. They are drilling a relief well 24/7 and expect to complete the relief well by the end of February. In parallel to the relief well effort, they are proposing to put in a system to capture and flare off the methane escaping from the well. The kill operation from the relief well will pump in cement from the bottom of the blown out well. This technique has had a very high success ratio in the past, it just takes a long time to drill a relief well to 8500 feet and hit a small target.

> The regulatory structure is unusual. EPA only has authority under a rarely used section of the Clean Air Act - Section 303 - Emergency Powers. It is a sweeping imminent and substantial endangerment authority but has only been used as an absolute last resort, when a state has exhausted absolutely every other regulatory mechanism. Our normal 'go to' CAA authority, 112(r)(7) - Prevention of Accidental Releases - is excluded from applying to facilities that store natural gas that is incident to transportation, which is what Aliso Canyon is.

> This incident is garnering a lot of media attention. Today Gov. Brown declared a state of emergency in Porter Ranch, the residential area closest to the well. Approximately 2500 people have been evacuated.

> We have recommended that DOT or EPA convene an incident specific NRT call to update our federal partners. This call is scheduled for Monday, 1/11.

>  
>  
> Happy New Year folks J No rest for the weary...  
>  
>  
>  
> Dan  
>  
>  
>  
> Daniel A. Meer, Assistant Director  
>  
> Superfund Division  
>  
> Emergency Response, Preparedness and Prevention Branch  
>  
> 415.972.3132 (O)  
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> 415.971.6792 (C)  
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[REDACTED]

[REDACTED]

On Jan 6, 2016, at 4:33 PM, Meer, Daniel  
<[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)> wrote:

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Happy New Year folks ☺ No rest for the weary...

Dan

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness  
and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

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-----Original Message-----

From: Meer, Daniel

Sent: Sunday, January 10, 2016 8:04 PM

To: [Gregory.W.Buie@uscg.mil](mailto:Gregory.W.Buie@uscg.mil)

Cc: Wampler, David <[Wampler.David@epa.gov](mailto:Wampler.David@epa.gov)>; Guria, Peter <[Guria.Peter@epa.gov](mailto:Guria.Peter@epa.gov)>; Allen, HarryL <[Allen.HarryL@epa.gov](mailto:Allen.HarryL@epa.gov)>; Eastman, Timothy G CIV <[Timothy.G.Eastman@uscg.mil](mailto:Timothy.G.Eastman@uscg.mil)>; Richard.R.Boes@uscg.mil; Robert.N.Hildebrand@uscg.mil; Steven.D.Poole@uscg.mil; Helmlinger, Andrew <[Helmlinger.Andrew@epa.gov](mailto:Helmlinger.Andrew@epa.gov)>; Minor, Dustin <[Minor.Dustin@epa.gov](mailto:Minor.Dustin@epa.gov)>; Wise, Robert <[Wise.Robert@epa.gov](mailto:Wise.Robert@epa.gov)>; Benson, Craig <[Benson.Craig@epa.gov](mailto:Benson.Craig@epa.gov)>  
Subject: Re: Aliso Canyon Methane Leak

Thanks Greg. We can discuss further on Tuesday at the RRT9 meeting.

Dan

Sent from my iPhone

Daniel Meer

Assistant Director

Superfund Division

USEPA, Region 9

> On Jan 10, 2016, at 7:16 PM, Buie, Gregory W CIV <[Gregory.W.Buie@uscg.mil](mailto:Gregory.W.Buie@uscg.mil)> wrote:

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> Dan,

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> I am not going to answer your hypothetical question as you posed it; instead I will state our position regarding natural gas.

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> Natural gas (aka methane) is not an oil. Response to a discharge or substantial threat of discharge of natural gas is not an oil response under FWPCA and is not funded from the OSLTF. However, oil may be present in some amounts when there is a natural gas incident, such as a leak, fire, or explosion from certain natural gas wells; usually production wells where there is natural gas condensate present. Such oil may discharge to navigable waters or adjoining shorelines or there may be a substantial threat of such a discharge. Therefore, while a response to a natural gas incident will in general not be a response under the FWPCA for which OSLTF funding is available, FOSC response to the discharge of oil to navigable waters or adjoining shorelines, or the substantial threat of such a discharge, may be funded from the OSLTF. When confronted with a natural gas incident, FOSCs should explain and document how the response for which OSLTF funding will be used is for the primary purpose of removing a discharge of oil to navigable waters, or adjoining shorelines or mitigating or preventing the substantial threat of such a discharge.

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> We have been monitoring the situation with the Aliso Canyon methane leak for several weeks now. We know that the leaking well is a storage well for odorized natural gas, not a natural gas production well. Recent open-source reports of

some type of oil being mobilized in the form of a mist or droplets due to conditions in the well, the adjacent formation, or SoCalGas's efforts to bring the well into control certainly raise the possibility of an OPA incident, but at this time we have not seen authoritative evidence of a discharge of oil to the waters of the United States. Accordingly, at the present time, it is our position that the OSLTF is NOT available to fund a federal response to the Aliso Canyon methane leak.

>

> We recognize that this is a dynamic situation and our position may change as more facts come to light. If EPA Region 9 can establish that a discharge of oil or a substantial threat of a discharge of oil to jurisdictional waters has occurred as a result of the methane leak or the efforts to control it, and EPA Region 9 determines it has to take action under its 311(c) response authority to mitigate the impacts of the oil discharge, then the OSLTF will be available for the FOSC's oil spill removal action. The FOSC will have to clearly establish the facts associated with the discharge (type of oil, quantity of oil, source of oil, impacted surface water bodies) and explain how the impacted waters are subject to CWA 311(c) response jurisdiction per the Rapanos guidance. The FOSC will also have to explain and document how the response for which OSLTF funding will be used is for the primary purpose of removing a discharge of oil to navigable waters, or adjoining shorelines or mitigating or preventing the substantial threat of such a discharge.

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> I will be at the Region 9 RRT meeting this week if you wish to discuss this further. Please ensure you copy Tim Eastman (my boss) on any emails you send me related to the Aliso methane leak.

>

> Greg

>

> Greg Buie

> Regional Manager

> Western States and Pacific Region

> Case Management Division

> National Pollution Funds Center

> Direct: (202) 795-6073

> Fax: (202) 372-8357

> Mobile: (202) 494-9091 <----- Best way to reach me

> E-mail: [Gregory.W.Buie@uscg.mil](mailto:Gregory.W.Buie@uscg.mil)

>

> CG NATIONAL POLLUTION FUNDS CENTER

> ATTN GREG BUIE

> US COAST GUARD STOP 7605

> 2703 MARTIN LUTHER KING JR AVE SE

> WASHINGTON DC 20593-7605

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> -----Original Message-----

> From: Meer, Daniel [<mailto:Meer.Daniel@epa.gov>]

> Sent: Friday, January 08, 2016 11:05 PM

> To: Buie, Gregory W CIV

> Cc: Wampler, David; Guria, Peter; Allen, HarryL

> Subject: [Non-DoD Source] Fwd: Aliso Canyon Methane Leak

>

> Greg - hope things are well. I meant to call you today. Hypothetical: if oily mist from a blown out natural gas well has an impact on surface water, could we open the fund for that?

>

> Thanks, Dan M

>

> Sent from my iPhone

> Daniel Meer

> Assistant Director  
> Superfund Division  
> USEPA, Region 9  
>

> Begin forwarded message:

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> From: "Wise, Robert" <[Wise.Robert@epa.gov](mailto:Wise.Robert@epa.gov)>  
> Date: January 8, 2016 at 7:39:17 PM PST  
> To: "Meer, Daniel" <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)>  
> Subject: Re: Aliso Canyon Methane Leak  
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> The Fish cops are going to all me tomorrow and let me know what's going on. I told them I am interested in off site migration potential. Most likely drainage ends up in the Sepulveda Basin which turns into the LA River.

>  
> Sent from my iPhone  
>

> On Jan 8, 2016, at 7:08 PM, Meer, Daniel <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)> wrote:  
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> Also this is an old oil reservoir so it is much more likely to be residual oil from the sandstone reservoir.  
>

> Sent from my iPhone  
> Daniel Meer  
> Assistant Director  
> Superfund Division  
> USEPA, Region 9  
>

> On Jan 8, 2016, at 4:11 PM, Wise, Robert <[Wise.Robert@epa.gov](mailto:Wise.Robert@epa.gov)> wrote:  
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> Happy End of the Week,  
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> Robert Wise, CHMM, MSEnv.  
>

> Federal On-Scene Coordinator  
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> USEPA Region 9 Emergency Response Section  
>

> 562-889-2572  
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> [Wise.robert@epa.gov](mailto:Wise.robert@epa.gov)  
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> From: Meer, Daniel  
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> Sent: Wednesday, January 06, 2016 4:33 PM  
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> To: Moxley, Bret; Reiner, Chris; Weden, Christopher; Benson, Craig; Shane, Dan; Zuroski, Donn; MUSANTE, JASON; Rogow, Michelle; Nattis, Randy; Powell, Martin; Wise, Robert; Calanog, Steve; Dunkelman, Tom; Waldon, MARGARET; Robberson, Bill; Henry, Karen; Deyoe, Jeremy; Johnstone, Jeremy; Jones, Bill; Richman, Lance; Wesling, Mary (Separated 12/31/15); Proboszcz, Angie; Lucas, Robert; Steiner, Cynthia; Albizu, Ramon; Lee, Barbara; Black, Ned; Boone, David; Bruck, Glenn; Temple, Celeste; Gill, Michael; Hiatt, Gerald; Levine, Herb; Samolis, Mark; Serda, Sophia; Stralka, Daniel; Terry, Robert; Wetmore, Cynthia  
>

> Subject: Aliso Canyon Methane Leak  
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> Hi All  
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> Just thought I would provide an update on what we have been doing on Aliso Canyon recently. Bret and Jason did a site tour before the holidays and more recently we (Jeremy Johnstone, Kay Lawrence, Harry Allen, Letitia Moore and myself) have been mainly in a 'watchful waiting' mode. There are several calls each day with the incident command and we are preparing a short daily summary of on-site actions.  
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> Briefly, since October 23rd there has been an uncontrolled methane leak from a Southern California Gas Company natural gas storage facility in the old Aliso Canyon oil field, northern San Fernando Valley. SoCal Gas injects natural gas in abandoned sandstone oil reservoirs for storage and then extracts the gas for transmission. There are 115 wells in this facility and one of them blew out and is spewing out methane at a very high rate. Methane is a potent green house gas, approximately 10 times more potent than CO2. SoCal Gas is not sure of the root cause of this blowout

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On Jan 6, 2016, at 4:33 PM, Meer, Daniel <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)> wrote:

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Briefly, since October 23<sup>rd</sup> there has been an uncontrolled methane leak from a Southern California Gas Company natural gas storage facility in the old Aliso Canyon oil field, northern San Fernando Valley. SoCal Gas injects natural gas in abandoned sandstone oil reservoirs for storage and then extracts the gas for transmission. There are 115 wells in this facility and one of them blew out and is spewing out methane at a very high rate. Methane is a potent green house gas, approximately 10 times more potent than CO<sub>2</sub>. SoCal Gas is not sure of the root cause of this blowout but they suspect that the well casing may be damaged and the gas may be escaping through holes in the casing at a relatively shallow depth.

SoCal Gas has tried to kill the well from the top by pumping in heavy fluids but those attempts have not been successful. They are drilling a relief well 24/7 and expect to complete the relief well by the end of February. In parallel to the relief well effort, they are proposing to put in a system to capture and flare off the methane escaping from the well. The kill operation from the relief well will pump in cement from the bottom of the blown out well. This technique has had a very high success ratio in the past, it just takes a long time to drill a relief well to 8500 feet and hit a small target.

The regulatory structure is unusual. EPA only has authority under a rarely used section of the Clean Air Act – Section 303 – Emergency Powers. It is a sweeping imminent and substantial endangerment authority but has only been used as an absolute last resort, when a state has exhausted absolutely every other regulatory mechanism. Our normal 'go to' CAA authority, 112(r)(7) – Prevention of Accidental Releases – is excluded from applying to facilities that store natural gas that is incident to transportation, which is what Aliso Canyon is.

This incident is garnering a lot of media attention. Today Gov. Brown declared a state of emergency in Porter Ranch, the residential area closest to the well. Approximately 2500 people have been evacuated.

We have recommended that DOT or EPA convene an incident specific NRT call to update our federal partners. This call is scheduled for Monday, 1/11.

Happy New Year folks ☺ No rest for the weary...

Dan

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

## Proboszcz, Angie

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**From:** Meer, Daniel  
**Sent:** Sunday, January 10, 2016 8:04 PM  
**To:** [Gregory.W.Buie@uscg.mil](mailto:Gregory.W.Buie@uscg.mil)  
**Cc:** Wampler, David;Guria, Peter;Allen, HarryL;Eastman, Timothy G  
[CIV;Richard.R.Boes@uscg.mil](mailto:CIV;Richard.R.Boes@uscg.mil);Robert.N.Hildebrand@uscg.mil;Steven.D.Poole@uscg.mil;H  
elmlinger, Andrew;Minor, Dustin;Wise, Robert;Benson, Craig  
**Subject:** Re: Aliso Canyon Methane Leak

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Thanks Greg. We can discuss further on Tuesday at the RRT9 meeting.

Dan

Sent from my iPhone  
Daniel Meer  
Assistant Director  
Superfund Division  
USEPA, Region 9

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>  
> Greg  
>  
> Greg Buie  
> Regional Manager  
> Western States and Pacific Region  
> Case Management Division  
> National Pollution Funds Center  
> Direct: (202) 795-6073  
> Fax: (202) 372-8357  
> Mobile: (202) 494-9091 <----- Best way to reach me  
> E-mail: [Gregory.W.Buie@uscg.mil](mailto:Gregory.W.Buie@uscg.mil)

>  
> CG NATIONAL POLLUTION FUNDS CENTER  
> ATTN GREG BUIE  
> US COAST GUARD STOP 7605  
> 2703 MARTIN LUTHER KING JR AVE SE  
> WASHINGTON DC 20593-7605

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> Cc: Wampler, David; Guria, Peter; Allen, HarryL  
> Subject: [Non-DoD Source] Fwd: Aliso Canyon Methane Leak

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> Daniel Meer  
> Assistant Director  
> Superfund Division  
> USEPA, Region 9

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> Begin forwarded message:

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> Superfund Division

> USEPA, Region 9

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> Robert Wise, CHMM, MSEnv.

- > Federal On-Scene Coordinator

> USEPA Region 9 Emergency Response Section

> 562-889-2572

> Wise.robert@epa.gov

> From: Meer, Daniel

> Sent: Wednesday, January 06, 2016 4:33 PM

> To: Moxley, Bret; Reiner, Chris; Weden, Christopher; Benson, Craig; Shane, Dan; Zuroski, Donn; MUSANTE, JASON; Rogow, Michelle; Nattis, Randy; Powell, Martin; Wise, Robert; Calanog, Steve; Dunkelman, Tom; Waldon, MARGARET; Robberson, Bill; Henry, Karen; Deyoe, Jeremy; Johnstone, Jeremy; Jones, Bill; Richman, Lance; Wesling, Mary (Separated 12/31/15); Proboszcz, Angie; Lucas, Robert; Steiner, Cyntia; Albizu, Ramon; Lee, Barbara; Black, Ned; Boone, David; Bruck, Glenn; Temple, Celeste; Gill, Michael; Hiatt, Gerald; Levine, Herb; Samolis, Mark; Serda, Sophia; Stralka, Daniel; Terry, Robert; Wetmore, Cynthia

> Subject: Aliso Canyon Methane Leak

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> Happy New Year folks J No rest for the weary...

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> Dan

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> Daniel A. Meer, Assistant Director

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> Superfund Division

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> Emergency Response, Preparedness and Prevention Branch

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> 415.972.3132 (O)

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> 415.971.6792 (C)

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## Proboszcz, Angie

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**From:** Meer, Daniel  
**Sent:** Saturday, January 09, 2016 12:35 PM  
**To:** Adair, Scot  
**Cc:** Green, Jay-M  
**Subject:** Re: Aliso Canyon Methane Leak

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Well the detail would be if SoCal Gas knows that oil is being emitted that is impacting surface water and is not reporting it. That could be intent to conceal a release.

Sent from my iPhone  
Daniel Meer  
Assistant Director  
Superfund Division  
USEPA, Region 9

On Jan 9, 2016, at 8:56 AM, Adair, Scot <[Adair.Scot@epa.gov](mailto:Adair.Scot@epa.gov)> wrote:

Thanks Dan -

If you hear back with any details that you thing will be of interest to us, please pass them along to Jay Green. I am TDY to Region 10 through the end of February. I know Jay has been monitoring this situation from a distance. Thanks again,

Scot

Sent from my iPhone

On Jan 8, 2016, at 7:04 PM, Meer, Daniel <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)> wrote:

This could be interesting, from a CID perspective. Dan

Sent from my iPhone  
Daniel Meer  
Assistant Director  
Superfund Division  
USEPA, Region 9

Begin forwarded message:

**From:** "Wise, Robert" <[Wise.Robert@epa.gov](mailto:Wise.Robert@epa.gov)>  
**Date:** January 8, 2016 at 4:10:59 PM PST  
**To:** "Meer, Daniel" <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)>  
**Cc:** "Allen, HarryL" <[Allen.HarryL@epa.gov](mailto:Allen.HarryL@epa.gov)>  
**Subject:** RE: Aliso Canyon Methane Leak

Hi Dan,

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**From:** Meer, Daniel

**Sent:** Wednesday, January 06, 2016 4:33 PM

**To:** Moxley, Bret; Reiner, Chris; Weden, Christopher; Benson, Craig; Shane, Dan; Zuroski, Donn; MUSANTE, JASON; Rogow, Michelle; Nattis, Randy; Powell, Martin; Wise, Robert; Calanog, Steve; Dunkelman, Tom; Waldon, MARGARET; Robberson, Bill; Henry, Karen; Deyoe, Jeremy; Johnstone, Jeremy; Jones, Bill; Richman, Lance; Wesling, Mary (Separated 12/31/15); Proboszcz, Angie; Lucas, Robert; Steiner, Cynthia; Albizu, Ramon; Lee, Barbara; Black, Ned; Boone, David; Bruck, Glenn; Temple, Celeste; Gill, Michael; Hiatt, Gerald; Levine, Herb; Samolis, Mark; Serda, Sophia; Stralka, Daniel; Terry, Robert; Wetmore, Cynthia  
**Subject:** Aliso Canyon Methane Leak

Hi All

Just thought I would provide an update on what we have been doing on Aliso Canyon recently. Bret and Jason did a site tour before the holidays and more recently we (Jeremy Johnstone, Kay Lawrence, Harry Allen, Letitia Moore and myself) have been mainly in a 'watchful waiting'

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We have recommended that DOT or EPA convene an incident specific NRT call to update our federal partners. This call is scheduled for Monday, 1/11.

Happy New Year folks ☺ No rest for the weary...

Dan

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

## Proboszcz, Angie

---

**From:** Meer, Daniel  
**Sent:** Friday, January 08, 2016 8:05 PM  
**To:** [Gregory.W.Buie@uscg.mil](mailto:Gregory.W.Buie@uscg.mil)  
**Cc:** Wampler, David;Guria, Peter;Allen, HarryL  
**Subject:** Fwd: Aliso Canyon Methane Leak

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Greg - hope things are well. I meant to call you today. Hypothetical: if oily mist from a blown out natural gas well has an impact on surface water, could we open the fund for that?

Thanks, Dan M

Sent from my iPhone  
Daniel Meer  
Assistant Director  
Superfund Division  
USEPA, Region 9

Begin forwarded message:

**From:** "Wise, Robert" <[Wise.Robert@epa.gov](mailto:Wise.Robert@epa.gov)>  
**Date:** January 8, 2016 at 7:39:17 PM PST  
**To:** "Meer, Daniel" <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)>  
**Subject:** Re: Aliso Canyon Methane Leak

The Fish cops are going to all me tomorrow and let me know what's going on. I rod them I am interested in off site migration potential. Most likely drainage ends up in the Sepulveda Basin which turns into the LA River.

Sent from my iPhone

On Jan 8, 2016, at 7:08 PM, Meer, Daniel <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)> wrote:

Also this is an old oil reservoir so it is much more likely to be residual oil from the sandstone reservoir.

Sent from my iPhone  
Daniel Meer  
Assistant Director  
Superfund Division  
USEPA, Region 9

On Jan 8, 2016, at 4:11 PM, Wise, Robert <[Wise.Robert@epa.gov](mailto:Wise.Robert@epa.gov)> wrote:

Hi Dan,

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Happy End of the Week,

Robert Wise, CHMM, MSEnv.  
Federal On-Scene Coordinator  
USEPA Region 9 Emergency Response Section  
562-889-2572  
[Wise.robert@epa.gov](mailto:Wise.robert@epa.gov)

---

**From:** Meer, Daniel

**Sent:** Wednesday, January 06, 2016 4:33 PM

**To:** Moxley, Bret; Reiner, Chris; Weden, Christopher; Benson, Craig; Shane, Dan; Zuroski, Donn; MUSANTE, JASON; Rogow, Michelle; Nattis, Randy; Powell, Martin; Wise, Robert; Calanog, Steve; Dunkelman, Tom; Waldon, MARGARET; Robberson, Bill; Henry, Karen; Deyoe, Jeremy; Johnstone, Jeremy; Jones, Bill; Richman, Lance; Wesling, Mary (Separated 12/31/15); Proboszcz, Angie; Lucas, Robert; Steiner, Cynthia; Albizu, Ramon; Lee, Barbara; Black, Ned; Boone, David; Bruck, Glenn; Temple, Celeste; Gill, Michael; Hiatt, Gerald; Levine, Herb; Samolis, Mark; Serda, Sophia; Stralka, Daniel; Terry, Robert; Wetmore, Cynthia

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Dan

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

---

[REDACTED]

[REDACTED]

[REDACTED]

On Jan 6, 2016, at 4:33 PM, Meer, Daniel <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)> wrote:

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Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

## Proboszcz, Angie

---

**From:** Meer, Daniel  
**Sent:** Friday, January 08, 2016 7:09 PM  
**To:** Wise, Robert  
**Cc:** Allen, HarryL  
**Subject:** Re: Aliso Canyon Methane Leak

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Also this is an old oil reservoir so it is much more likely to be residual oil from the sandstone reservoir.

Sent from my iPhone  
Daniel Meer  
Assistant Director  
Superfund Division  
USEPA, Region 9

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---

**From:** Meer, Daniel  
**Sent:** Wednesday, January 06, 2016 4:33 PM  
**To:** Moxley, Bret; Reiner, Chris; Weden, Christopher; Benson, Craig; Shane, Dan; Zuroski, Donn;

MUSANTE, JASON; Rogow, Michelle; Nattis, Randy; Powell, Martin; Wise, Robert; Calanog, Steve; Dunkelman, Tom; Waldon, MARGARET; Robberson, Bill; Henry, Karen; Deyoe, Jeremy; Johnstone, Jeremy; Jones, Bill; Richman, Lance; Wesling, Mary (Separated 12/31/15); Proboszcz, Angie; Lucas, Robert; Steiner, Cyntia; Albizu, Ramon; Lee, Barbara; Black, Ned; Boone, David; Bruck, Glenn; Temple, Celeste; Gill, Michael; Hiatt, Gerald; Levine, Herb; Samolis, Mark; Serda, Sophia; Stralka, Daniel; Terry, Robert; Wetmore, Cynthia

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Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)



## Proboszcz, Angie

---

**From:** Meer, Daniel  
**Sent:** Friday, January 08, 2016 7:05 PM  
**To:** Adair, Scot  
**Subject:** Fwd: Aliso Canyon Methane Leak

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

This could be interesting, from a CID perspective. Dan

Sent from my iPhone  
Daniel Meer  
Assistant Director  
Superfund Division  
USEPA, Region 9

Begin forwarded message:

**From:** "Wise, Robert" <[Wise.Robert@epa.gov](mailto:Wise.Robert@epa.gov)>  
**Date:** January 8, 2016 at 4:10:59 PM PST  
**To:** "Meer, Daniel" <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)>  
**Cc:** "Allen, HarryL" <[Allen.HarryL@epa.gov](mailto:Allen.HarryL@epa.gov)>  
**Subject:** RE: Aliso Canyon Methane Leak

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Daniel A. Meer, Assistant Director



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Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

## Proboszcz, Angie

---

**From:** Meer, Daniel  
**Sent:** Friday, January 08, 2016 1:05 PM  
**To:** FEMA-R9Watchofficer  
**Subject:** RE: Contact information - Dan Meer  
**Attachments:** Aliso Canyon Briefing Paper.public.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

We are developing daily situational updates but we are claiming them as pre decisional, so I would prefer not to distribute them outside of EPA.

Attached is a briefing paper from 21 December. Maybe the best thing would be to schedule a conference call so I can brief out to FEMA. I am in today until 1600

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

---

**From:** FEMA-R9Watchofficer [<mailto:FEMA-R9Watchofficer@fema.dhs.gov>]  
**Sent:** Friday, January 08, 2016 10:49 AM  
**To:** Meer, Daniel  
**Cc:** FEMA-R9Watchofficer  
**Subject:** RE: Contact information - Dan Meer

Dan,  
We are trying to get more situational awareness on the Aliso Canyon gas leak. Do you have any products we can have in order to get a better SA picture?

v/r

Scott Lee  
Watch Analyst  
FEMA Region 9 Watch  
Office: 510-627-7802  
[Donald.Lee2@fema.dhs.gov](mailto:Donald.Lee2@fema.dhs.gov)  
[FEMA-R9watchofficer@fema.dhs.gov](mailto:FEMA-R9watchofficer@fema.dhs.gov)

---

**From:** Richman, Lance [<mailto:Richman.Lance@epa.gov>]  
**Sent:** Friday, January 08, 2016 10:43 AM  
**To:** FEMA-R9Watchofficer

**Cc:** Meer, Daniel; Lawrence, Kathryn  
**Subject:** RE: Contact information - Dan Meer

Tom: As we discussed this morning we have not scheduled any future RRT9 incident specific calls for the Aliso Canyon Incident.

Dan's contact information is below.

**Daniel A. Meer, Assistant Director**  
**Superfund Division**  
**Emergency Response, Preparedness and Prevention Branch**  
**415.972.3132 (O)**  
**415.971.6792 (C)**

Regards

Lance

---

Lance Richman  
Superfund Programs  
U.S. EPA Pacific Southwest Region  
75 Hawthorne St. SFD 9-3  
San Francisco, CA 94105  
Phone on TWT: 1.415.972.3022 (office voicemail)  
Phone on MF: 1.510.627.7710 (alternate workspace)  
24 Hour Oil Spill Response: 1.800.424.8802

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**From:** FEMA-R9Watchofficer [<mailto:FEMA-R9Watchofficer@fema.dhs.gov>]  
**Sent:** Friday, January 08, 2016 10:17 AM  
**To:** Richman, Lance <[Richman.Lance@epa.gov](mailto:Richman.Lance@epa.gov)>  
**Subject:** Contact information

Good Morning Lance,

I was wondering if you could please provide contact information for Dan Meer from EPA (phone and email).

Also, do you have any information on when the next Aliso Regional Response Team 9 Incident Specific Call will be (day/time)?

Thank you,

Respectfully,

Thomas M. Fossee

Watch Officer

FEMA Region 9 Watch Center

24 Hour Watch Desk: 888.709.3362

[Fema-R9WatchOfficer@fema.dhs.gov](mailto:Fema-R9WatchOfficer@fema.dhs.gov)

## **Briefing Paper**

### **Southern California Gas Company Methane Gas Release**

#### **Aliso Canyon Natural Gas Storage Facility**

**21 December 2015**

**Overview:** On 23 October 2015, an uncontrolled natural gas release was discovered at the Southern California Gas Company (SoCal Gas) Natural Gas Storage Facility at Aliso Canyon, an old oil field in the northern San Fernando Valley, Los Angeles County. SoCal Gas injects natural gas into abandoned oil reservoirs for storage and then withdraws the gas for transmission and sale. SoCal Gas is a subsidiary of Sempra Energy Utilities.

The Aliso Canyon storage facility contains 115 gas withdrawal/injection wells and the well that is leaking, Well SS 25, is over 8000 feet deep. Aliso Canyon has a total storage capacity of 86 bcf (billion cubic feet), one of the largest natural gas storage facilities in the United States.

Porter Ranch, an affluent residential community of approximately 30,000 people, is located near the Aliso Canyon storage facility. The nearest Porter Ranch residents that are being affected live approximately 1 mile away and 1200 feet below the leaking wellhead.

**Current Status:** SoCal Gas is the responsible party and is attempting to plug the leaking well, with a team of well control contractors. The geology of the area is complex and has complicated the well kill effort. SoCal Gas's response thus far is on two fronts: attempts to kill the well from the top and drilling relief wells to kill the well from the bottom. SoCal has 157 people in their Incident Action Plan, working on this relief effort.

**Top Kill Efforts:** SoCal Gas has attempted multiple 'top kill' operations on SS 25, none successful. They are concerned about top kill efforts degrading the integrity of the well bore, so they are cautious with their operations. The next top kill effort will be a so called 'junk shot', that pumps material such as ball bearings in heavy mud down the wellbore, in an attempt to stop the flow of gas. The next top kill operation is scheduled for 23 December, at the earliest.

**Relief Wells:** SoCal Gas is drilling two relief wells. The first relief well is at approximately 3800 feet and the second relief well is scheduled to spud on 22 January 2016. The relief well, if successful, will intercept the bottom of the leaking well and pump in cement. This technique has had great success in controlling blow outs. The drilling operation continues around the clock and the relief wells are estimated to take 3-4 months to complete.

**Environmental and Public Health Issues:** Estimates of how much methane is leaking are not particularly reliable but are reported to be on the order of 2-3 million pounds per day. Measurements of methane in nearby residential areas show levels that are substantially below the flammability limit and that do not represent an acute health risk. However, exposure to the

mercaptan odorant additive in the natural gas can produce symptoms such as nausea, headaches, vomiting, abdominal discomfort, respiratory irritation and dizziness and residents have reported effects that are consistent with short term mercaptan exposure. The LA County Department of Public Health has determined that the emissions from this incident are causing health effects to some Porter Ranch residents and is requiring that SoCal Gas provide temporary relocation (see below).

**Regulatory Actions:** State and local regulatory agencies and jurisdictions are involved with the response to this methane leak.

**State Agencies:**

Division of Oil, Gas and Geothermal Resources (DOGGR), Department of Conservation, Natural Resources Agency;

California Public Utility Commission (CPUC);

California Office of Emergency Services (OES);

California Environmental Protection Agency (Cal/EPA).

**Local Agencies:**

Los Angeles County Certified Unified Program Agency (LA County CUPA)

Los Angeles County Fire/HazMat

City of Los Angeles

South Coast Air Quality Management District (SCAQMD)

Los Angeles County Department of Public Health

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Cal/EPA has contacted the Interagency Modeling and Atmospheric Assessment Center (IMAAC) for possible assistance in modeling the methane dispersion. IMAAC is a federal interagency with expertise in plume and atmospheric modeling.

**Federal Actions:**

The Region is participating in daily operational calls and providing daily summaries. On 15 December two on-scene coordinators participated in a site tour with the Los Angeles County Fire and Hazardous Materials Unit and representatives from Lawrence Livermore National Laboratory.

[REDACTED]

The most direct federal authority is held by the Department of Transportation, Office of Pipeline and Hazardous Materials Safety Administration. However the DOT authority has been delegated to California and it is not clear what, if any, action DOT/PHMSA is willing to take in this incident.

## Proboszcz, Angie

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**From:** Meer, Daniel  
**Sent:** Thursday, January 07, 2016 11:57 AM  
**To:** Johnstone, Jeremy  
**Subject:** old briefing paper on AC  
**Attachments:** Aliso Canyon Briefing Paper.docx

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)



# ***ATTORNEY CLIENT PRIVILEGE – DO NOT RELEASE***

## **Briefing Paper**

### **Southern California Gas Company Methane Gas Release**

#### **Aliso Canyon Natural Gas Storage Facility**

**21 December 2015**

**Overview:** On 23 October 2015, an uncontrolled natural gas release was discovered at the Southern California Gas Company (SoCal Gas) Natural Gas Storage Facility at Aliso Canyon, an old oil field in the northern San Fernando Valley, Los Angeles County. SoCal Gas injects natural gas into abandoned oil reservoirs for storage and then withdraws the gas for transmission and sale. SoCal Gas is a subsidiary of Sempra Energy Utilities.

The Aliso Canyon storage facility contains 115 gas withdrawal/injection wells and the well that is leaking, Well SS 25, is over 8000 feet deep. Aliso Canyon has a total storage capacity of 86 bcf (billion cubic feet), one of the largest natural gas storage facilities in the United States.

Porter Ranch, an affluent residential community of approximately 30,000 people, is located near the Aliso Canyon storage facility. The nearest Porter Ranch residents that are being affected live approximately 1 mile away and 1200 feet below the leaking wellhead.

**Current Status:** SoCal Gas is the responsible party and is attempting to plug the leaking well, with a team of well control contractors. The geology of the area is complex and has complicated the well kill effort. SoCal Gas's response thus far is on two fronts: attempts to kill the well from the top and drilling relief wells to kill the well from the bottom. SoCal has 157 people in their Incident Action Plan, working on this relief effort.

**Top Kill Efforts:** SoCal Gas has attempted multiple 'top kill' operations on SS 25, none successful. They are concerned about top kill efforts degrading the integrity of the well bore, so they are cautious with their operations. The next top kill effort will be a so called 'junk shot', that pumps material such as ball bearings in heavy mud down the wellbore, in an attempt to stop the flow of gas. The next top kill operation is scheduled for 23 December, at the earliest.

**Relief Wells:** SoCal Gas is drilling two relief wells. The first relief well is at approximately 3800 feet and the second relief well is scheduled to spud on 22 January 2016. The relief well, if successful, will intercept the bottom of the leaking well and pump in cement. This technique has had great success in controlling blow outs. The drilling operation continues around the clock and the relief wells are estimated to take 3-4 months to complete.

**Environmental and Public Health Issues:** Estimates of how much methane is leaking are not particularly reliable but are reported to be on the order of 2-3 million pounds per day.

Measurements of methane in nearby residential areas show levels that are substantially below the flammability limit and that do not represent an acute health risk. However, exposure to the mercaptan odorant additive in the natural gas can produce symptoms such as nausea, headaches, vomiting, abdominal discomfort, respiratory irritation and dizziness and residents have reported effects that are consistent with short term mercaptan exposure. The LA County Department of Public Health has determined that the emissions from this incident are causing health effects to some Porter Ranch residents and is requiring that SoCal Gas provide temporary relocation (see below).

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**Federal Actions:**

The Region is participating in daily operational calls and providing daily summaries. On 15 December two on-scene coordinators participated in a site tour with the Los Angeles County Fire and Hazardous Materials Unit and representatives from Lawrence Livermore National Laboratory.

[REDACTED]

[REDACTED]

On 18 December the Region issued an information request to SoCal Gas pursuant to the Clean Air Act Section 114.

[REDACTED]

## Proboszcz, Angie

---

**From:** Meer, Daniel  
**Sent:** Monday, December 21, 2015 1:11 PM  
**To:** Lee, Eugene;Schumann, Jean  
**Cc:** Irizarry, Gilberto;Reggie Cheatham ([cheatham.reggie@epa.gov](mailto:cheatham.reggie@epa.gov));Tulis, Dana  
**Subject:** Aliso Canyon Briefing Paper for the Administrator  
**Attachments:** Aliso Canyon Briefing Paper.docx; Letter to Dennis Arriola Request for Info.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

This is close to final. The RA will send it along and I don't know if he will make changes before he sends it.

Dan

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

# ***ATTORNEY CLIENT PRIVILEGE – DO NOT RELEASE***

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[REDACTED]

[REDACTED]

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[REDACTED]



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

DEC 18 2015

Via email (DArriola@semprautilities.com) and Certified Mail

CERTIFIED MAIL NO. 7015 0640 0007 0638 0669  
RETURN RECEIPT REQUESTED

In Reply Refer to:  
Southern California Gas Company Aliso Canyon Natural  
Gas Release

Dennis Arriola  
President and CEO  
Southern California Gas Company  
555 W 5th St  
Los Angeles, CA 90013-1010

RE: Request for Information, Southern California Gas Company Aliso Canyon Natural Gas  
Release

Dear Mr. Arriola:

The United States Environmental Protection Agency ("EPA") is conducting an investigation of the natural gas release (the "Release") at the Southern California Gas Company (the "Company's") Aliso Canyon Natural Gas Storage Facility located at 12801 Tampa Ave. in Northridge, CA, (the "Facility") that was discovered on or about October 23, 2015.

With this letter and its enclosure ("Information Request"), EPA seeks additional information and documents concerning the Company's compliance with the Clean Air Act, 42 U.S.C. §§ 7401 *et seq* ("CAA"). This Information Request is authorized pursuant to Section 114 of the CAA, 42 U.S.C. § 9614. Your responses to this letter must be made by a letter, signed by a person or persons duly authorized to represent the Company. Electronic copies of submittals are preferred. EPA believes that much of the requested information is, or should be, readily available at the Facility. If there are any responsive documents or information which you are unable to provide, please provide an explanation for, and documentation of reasons for, the Company's inability to provide that information. Please send your submittals so that they are received by no later than **December 31, 2015**. Address your response to:



Kathryn Lawrence (SFD-9-3)  
Section Chief  
Emergency Prevention and Preparedness Section  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne St.  
San Francisco, CA 94105  
lawrence.kathryn@epa.gov

Please note that, pursuant to regulations located at 40 CFR Part 2, Subpart B, you are entitled to assert a business confidentiality claim covering any part of the submitted information as defined in 40 CFR § 2.201(c). Asserting a business confidentiality claim does not relieve you from the obligation to fully respond to this letter. Failure to assert such a claim makes the submitted information subject to public disclosure upon request and without further notice to you, pursuant to the Freedom of Information Act, 5 U.S.C. § 552. Information subject to a business confidentiality claim may be available to the public only to the extent set forth in the above-cited regulation. EPA has the authority to use the information requested herein in an administrative, civil, or criminal action. In addition, EPA has not waived any rights to take enforcement action for past or future violations.

The Company's compliance with this Information Request is mandatory. Failure to respond fully and truthfully may result in an enforcement action being taken in accordance with Section 113 of the CAA, 42 U.S.C. § 7413. This may include civil and administrative penalties of up to \$37,500 per day of noncompliance. In addition, the submission of knowingly false or misleading statements may be punished by a fine pursuant to Title 18 of the U.S. Code, or by imprisonment for not more than two years, or both.

This request for information is not subject to review by the Office of Management and Budget ("OMB" under the Paperwork Reduction Act because it is not a "collection of information" within the meaning of 44 U.S.C. §§ 3502(3), 3507, and 3512. *See, also*, 4 CFR §§ 1320.3(c), 1320.5, and 1320.6(a). Furthermore, this request is exempt from OMB review under the Paperwork Reduction Act because it is part of an investigation of a specific individual or entity. 44 U.S.C. § 3518(c)(1); 5 CFR § 1320.4.

If you have questions about the legal aspects of this Information Request, please contact Ms. Letitia Moore, U.S. EPA Assistant Regional Counsel, at (415) 972-3928 or [moore.letitia@epa.gov](mailto:moore.letitia@epa.gov). The Region IX technical contact for this information request is Kathryn Lawrence, who may be reached at (415) 972-3039 or [johnstone.jeremy@epa.gov](mailto:johnstone.jeremy@epa.gov). We thank you in advance for your cooperation.

Sincerely,



Enrique Manzanilla, Director  
Superfund Division

Enclosures (2)

1 - Information Request

2 - Confidential Business Information

cc(via email w/enclosures):

Jimmie Cho, SoCalGas

John Geroch, DOGGR

Mohsen Nazemi, SCAQMD

Alice Reynolds, CalEPA

Bill Jones, LACFD

Gregory Reynar, LAFD



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105**

Enclosure 1

Information Request  
Southern California Gas Co.

Please provide the information requested in the Information Request section of this Enclosure such that it is received by no later than **December 31, 2015**.

**INSTRUCTIONS**

1. Please provide a separate response to each request, and identify each response by the number of the request to which it corresponds. For each document produced, identify the request to which it is responsive.
2. Knowledge or information that has not been memorialized in any document, but is nonetheless responsive to a request, must be provided in a narrative form
3. All responsive documents must be: a) provided as an accurate and legible copy in a searchable PDF file format; b) submitted on via electronic media (thumb drive, CD, or DVD); and c) number stamped in sequential order (e.g. BATES stamped). Furthermore, data should be provided in spreadsheet format (e.g., Excel format), when available, rather than as image or PDF formats.
4. The scope of this Information Request includes all information and documents obtained or independently developed by the Company, its attorneys, consultants or any of their agents, consultants, or employees.
5. The Company may not withhold any information from EPA on the grounds that it is confidential business information. EPA has promulgated regulations, under 40 CFR Part 2, Subpart B, to protect confidential business information that it receives. The Company may assert a business confidentiality claim (in the manner specified in 40 CFR § 2.203(b)) for all or part of the information requested by EPA. However, business information is entitled to confidential treatment only if it satisfies the criteria set forth in 40 CFR § 2.208. EPA will disclose business information entitled to confidential treatment only as authorized by 40 CFR Part 2, Subpart B. If no claim of confidentiality accompanies the information at the time EPA receives it, EPA may make it available to the public without further notice. [Some EPA Regions refer to an enclosure such as the one I've included as "Enclosure 4" here for further discussion of the CBI issue and process].
6. If information or documents not known or available to the Company at the time of its response to this Information Request later become known or available to it, it must supplement its response to EPA. Moreover, should the Company find at any time after the submission of its response that any portion of the submitted information is false or misrepresents the truth, the Company must notify EPA as soon as possible and provide EPA with a corrected response.

7. If information responsive to a request is not in the Company's possession, custody, or control, identify the persons or entities from whom such information may be obtained. For each individual or entity that possesses responsive information, please provide the following: name, last known or current address, telephone number, and affiliation with the Company or the Facility.

8. If you believe there are grounds for withholding information or documents that are responsive to this request, e.g., attorney-client privilege, you must identify the information or documents and state the basis for withholding the information.

## DEFINITIONS

The following definitions apply to the following terms (words or phrases) as they appear in this Information Request. Defined terms are enclosed in quotation marks:

1. "You" or the "Company" shall mean the Southern California Gas Co., or its officers, managers, employees, contractors, trustees, partners, successors, assigns, and agents.

2. "Facility" means all buildings, equipment, structures, installations, pipes, or stationary items owned, leased, or operated by the Company at the Aliso Canyon Natural Gas Storage Facility property or properties located at 12801 Tampa Ave. in Northridge, CA, or contiguous or adjacent to that address.

3. "Document" or "documents" shall mean any printing, typing, writing, photostat, or any other copy, microfilm, film record, video record, CD, sound recording, tape, disc, or other type of memory associated with computers, including any instructions necessary to read such material, and any other tangible item recording information.

5. "Release" shall mean any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, including the abandonment or discharging of barrels, containers, and other closed receptacles containing any hazardous substances, extremely hazardous substances, regulated substances, air pollutant, pollutants or contaminants. "Release" shall include "accidental release" as that term is defined by 40 C.F.R. § 68.3.

7. "Standard Operating Procedure" or "SOP" means any express method or series of protocols to be followed routinely for the performance of designated operations or in designated situations by you or your subcontractors.

8. "Well SS 25 Release" shall mean the Release of odorized natural gas from Facility Standard Sesnon Well SS 25 that commenced on or about October 23, 2015.

9. All terms not defined herein shall have their ordinary meaning, unless such terms are defined in the CAA, CERCLA, EPCRA, 40 CFR Part 68, 40 CFR Part 300, 40 CFR Part 302, 40 CFR Part 355 or 40 CFR Part 372, in which case the statutory or regulatory definitions shall apply.

## INFORMATION REQUEST

1. Provide the following general information:
  - a. A Facility map and plot plan, to include the well pad for Standard Sesnon Well 25 ("Well SS 25");
  - b. A description of the Facility and operations;
  - c. A management organizational chart for the Facility (include identification of personnel with environmental responsibilities); and
  - d. Descriptive information about any/all other natural gas storage fields owned or operated by the Company and/or its parent corporation.
2. With respect to the Well SS 25 Release provide copies of all submittals made to any local, state or federal agencies relating to the Release as of the date of the response to this Information Request.
3. Unless otherwise provided in response to Item 2 above, provide the following regarding the Well SS 25 Release. If provided in in response to Item 2 above, identify the corresponding document and page numbers.
  - a. A map or other depiction showing, as well as a description of, the point(s) of the Release;
  - b. A description of the cause of the Release, including all known and/or suspected root causes and contributory factors;
  - c. Design specifications for Well SS 25;
  - d. A detailed history of physical changes or modifications made to Well SS 25, including the dates such modifications were implemented and the purpose for which the modifications were made;
  - e. A description of the Company's mechanical integrity program for the inspection, testing and preventive maintenance for Well SS 25, including leak detection;
  - f. All documents that describe Standard Operating Procedures used in the inspection, testing and preventive maintenance of Well SS 25, including leak detection;
  - g. A listing of recognized and generally accepted good engineering practices, used in the development and implementation of the Company's inspection, testing and preventive maintenance of Well SS 25;
  - h. Inspection, maintenance, and leak detection records for Well SS 25 from January 1, 2012 to the present;

- i. All documents that describe Standard Operating Procedures used for accident mitigation or emergency response regarding any risks associated with the maintenance and operation of Well SS 25 or other similarly-situated wells;
- j. A description of current fire safety/prevention measures being implemented both at the Release point(s) and at the Well SS 25 wellhead;
- k. A description of current Incident Command Structure (ICS) organizational structure (ICS 207 or equivalent);
- l. Identification of any/all incident-specific website(s) that any safety and/or regulatory agencies have current access to. Provide access to EPA;
- m. Identify and provide copies of any notifications of the Release made to public agencies, including agency name; date, time and method of notification; whom contacted; and notification/report number (as applicable);
- n. Copies of the Company's policies and procedures with respect to public agency notifications of natural gas leaks at the Facility;
- o. Company-prepared estimates of release rates to the atmosphere (daily, weekly, monthly, and/or yearly) for natural gas, total volatile organic compounds (VOCs) (as defined under 40 CFR § 51.100) and total reduced sulfur (TRS) from Well SS 25 during the Well SS 25 Release, with supporting documentation of methodology/methodologies employed in arriving at estimate(s); and
- p. A description of all activities undertaken, as of the date of your response to this Information Request, to mitigate the rate and quantity of natural gas released during the Well SS 25 Release.





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105**

Enclosure 2

**Confidential Business Information (CBI)  
Assertion and Substantiation Requirements**

You may assert a business confidentiality claim covering all or part of the information you provide in response to this information request for any business information entitled to confidential treatment under section 114(c) of the Clean Air Act (the Act), 42 U.S.C. § 7414(c), and 40 C.F.R. Part 2, subpart B. Under section 114(c) of the Act, you are entitled to confidential treatment of information that would divulge methods or processes entitled to protection as trade secrets. Under 40 C.F.R. Part 2, subpart B, business confidentiality means "the concept of trade secrecy and other related legal concepts which give (or may give) a business the right to preserve the confidentiality of business information and to limit its use or disclosure by others in order that the business may obtain or retain business advantages it derives from its rights in the information." 40 C.F.R. § 2.201(e).

Information covered by a claim of business confidentiality will be disclosed by the EPA only to the extent, and by means of the procedures, set forth in section 114(c) of the Act and 40 C.F.R. Part 2, subpart B. If you fail to furnish a business confidentiality claim with your response to this information request, the EPA will construe your failure as a waiver of that claim, and the information may be made available to the public without further notice to you.

To assert a business confidentiality claim, you must place on (or attach to) all information you desire to assert as business confidential either a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as "trade secret," "proprietary," or "company confidential" at the time you submit your response to this information request. Allegedly confidential portions of otherwise non-confidential documents should be clearly identified, and may be submitted separately to facilitate identification and handling by the EPA. You should indicate if you desire confidential treatment only until a certain date or until the occurrence of a certain event.

The criteria the EPA will use in determining whether material you claim as business confidential is entitled to confidential treatment are set forth at 40 C.F.R. §§ 2.208 and 2.301. These regulations provide, among other things, that you must satisfactorily show that: (1) the information is within the scope of business confidentiality as defined at 40 C.F.R. § 2.201(e); (2) that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so; (3) the information is not and has not been reasonably obtainable by legitimate means without your consent; and (4) the disclosure of the information is likely to cause substantial harm to your business's competitive position. See 40 C.F.R. § 2.208 (a)-(e). Emission data, as defined at 40 C.F.R. § 2.301(a)(2), is expressly not entitled to confidential treatment under 40 C.F.R. Part 2, subpart B. See 42 U.S.C. § 7414(c); 40 C.F.R. § 2.301(e).

If you assert a claim of business confidentiality in connection with information and documents forwarded in response to this request for information, in accordance with 40 C.F.R.

§ 2.204(e)(4), the EPA is requesting that you answer the following questions with respect to any information or document for which you assert a claim of business confidentiality:

1. What specific portions of the information are alleged to be entitled to confidential treatment? Specify by page, paragraph and sentence when identifying the information subject to your claim.
2. For what period of time do you request that the information be maintained as confidential, e.g., until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, specify that event. Additionally, explain why the information should be protected for the time period you have specified.
3. What measures have you taken to protect the information claimed as confidential from undesired disclosure? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, explain with specificity whether disclosure of the information is likely to result in substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?
7. Is there any other explanation you deem relevant to the EPA's determination of your business confidentiality claim that is not covered in the preceding questions? If so, you may provide such additional explanation.

Submit your answers to the above questions concurrently with your response to this information request if you have claimed any information as business confidential. See 40 C.F.R.

§ 2.204(e)(2). Pursuant to 40 C.F.R. § 2.205(b)(2), you may request an extension of this deadline. The EPA will construe your failure to furnish timely comments as a waiver of your confidentiality claim, consistent with 40 C.F.R. § 2.204(e)(1). Please submit your comments to:



Letitia Moore  
Assistant Regional Counsel  
U.S. EPA Region 9  
75 Hawthorne St.  
San Francisco, CA 94105  
[Moore.letitia@epa.gov](mailto:Moore.letitia@epa.gov)

Pursuant to 40 C.F.R. § 2.205(c), you are hereby advised that information you submit as part of your answers or comments may be regarded by the EPA as entitled to confidential treatment if, when it is received by the EPA, it is marked in accordance with 40 C.F.R. § 2.203(b). As required by 40 C.F.R. § 2.204(e)(6), you may assert a business confidentiality claim covering all or part of your response to these questions, as provided in 40 C.F.R. § 2.203(b). Information covered by such a claim will be disclosed by the EPA only to the extent, and by means of the procedures, set forth in section 114(c) of the Act and 40 C.F.R. Part 2. The EPA will construe the failure to furnish a confidentiality claim with your comments as a waiver of that claim, and the information may be made available to the public without further notice to you.

## **Proboszcz, Angie**

---

**From:** Meer, Daniel  
**Sent:** Monday, December 21, 2015 12:54 PM  
**To:** Manzanilla, Enrique;Quast, Sylvia  
**Cc:** Moore, Letitia  
**Subject:** Revised Aliso Canyon Briefing Paper  
**Attachments:** Aliso Canyon Briefing Paper.docx

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

This version includes Letitia's edits.

Just a reminder, we are planning to send this paper and the information request to M Fritz.

Dan M

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

# ***ATTORNEY CLIENT PRIVILEGE – DO NOT RELEASE***

## **Briefing Paper**

### **Southern California Gas Company Methane Gas Release**

#### **Aliso Canyon Natural Gas Storage Facility**

**21 December 2015**

**Overview:** On 23 October 2015, an uncontrolled natural gas release was discovered at the Southern California Gas Company (SoCal Gas) Natural Gas Storage Facility at Aliso Canyon, an old oil field in the northern San Fernando Valley, Los Angeles County. SoCal Gas injects natural gas into abandoned oil reservoirs for storage and then withdraws the gas for transmission and sale. SoCal Gas is a subsidiary of Sempra Energy Utilities.

The Aliso Canyon storage facility contains 115 gas withdrawal/injection wells and the well that is leaking, Well SS 25, is over 8000 feet deep. Aliso Canyon has a total storage capacity of 86 bcf (billion cubic feet), one of the largest natural gas storage facilities in the United States.

Porter Ranch, an affluent residential community of approximately 30,000 people, is located near the Aliso Canyon storage facility. The nearest Porter Ranch residents that are being affected live approximately 1 mile away and 1200 feet below the leaking wellhead.

**Current Status:** SoCal Gas is the responsible party and is attempting to plug the leaking well, with a team of well control contractors. The geology of the area is complex and has complicated the well kill effort. SoCal Gas's response thus far is on two fronts: attempts to kill the well from the top and drilling relief wells to kill the well from the bottom. SoCal has 157 people in their Incident Action Plan, working on this relief effort.

**Top Kill Efforts:** SoCal Gas has attempted multiple 'top kill' operations on SS 25, none successful. They are concerned about top kill efforts degrading the integrity of the well bore, so they are cautious with their operations. The next top kill effort will be a so called 'junk shot', that pumps material such as ball bearings in heavy mud down the wellbore, in an attempt to stop the flow of gas. The next top kill operation is scheduled for 23 December, at the earliest.

**Relief Wells:** SoCal Gas is drilling two relief wells. The first relief well is at approximately 3800 feet and the second relief well is scheduled to spud on 22 January 2016. The relief well, if successful, will intercept the bottom of the leaking well and pump in cement. This technique has had great success in controlling blow outs. The drilling operation continues around the clock and the relief wells are estimated to take 3-4 months to complete.

**Environmental and Public Health Issues:** Estimates of how much methane is leaking are not particularly reliable but are reported to be on the order of 2-3 million pounds per day.

Measurements of methane in nearby residential areas show levels that are substantially below the flammability limit and that do not represent an acute health risk. However, exposure to the mercaptan odorant additive in the natural gas can produce symptoms such as nausea, headaches, vomiting, abdominal discomfort, respiratory irritation and dizziness and residents have reported effects that are consistent with short term mercaptan exposure. The LA County Department of Public Health has determined that the emissions from this incident are causing health effects to some Porter Ranch residents and is requiring that SoCal Gas provide temporary relocation (see below).

**Regulatory Actions:** State and local regulatory agencies and jurisdictions are involved with the response to this methane leak.

**State Agencies:**

Division of Oil, Gas and Geothermal Resources (DOGGR), Department of Conservation, Natural Resources Agency;

California Public Utility Commission (CPUC);

California Office of Emergency Services (OES);

California Environmental Protection Agency (Cal/EPA).

**Local Agencies:**

Los Angeles County Certified Unified Program Agency (LA County CUPA)

Los Angeles County Fire/HazMat

City of Los Angeles

South Coast Air Quality Management District (SCAQMD)

Los Angeles County Department of Public Health

DOGGR has issued two orders to SoCal Gas, to provide information on the leaking well (18 November) and to develop plans for expeditiously capturing the escaping gas, stopping the leak and communicating with state and local regulators (10 December). The 10 December order includes the convening of experts from the national laboratories (Lawrence Berkeley, Lawrence Livermore and Sandia) to review data and assist DOGGR in evaluating SoCal Gas's plans for stopping the leak.

The CPUC is conducting an investigation to assess SoCal Gas actions before and after the well failure that resulted in the methane gas release. This includes public notification and issues related to operation and maintenance of the storage facility. CPUC has requested information from SoCal Gas and, in coordination with DOGGR, directed SoCal Gas to hire an independent, third party to conduct a root cause analysis of the well blow out.

The Los Angeles County Department of Public Health ordered SoCal Gas to provide temporary relocation to residents. As of December 1<sup>st</sup>, 778 households had either relocated (282) or were in the process of relocating (496). SoCal Gas has established a community center in Porter Ranch to answer questions and assist residents with temporary relocation and claims.

The Los Angeles City Attorney announced a lawsuit against SoCal Gas for its handling of the methane leak and the SCAQMD has cited SoCal Gas for a public nuisance due to the odors from the mercaptan additive.

Cal/EPA has contacted the Interagency Modeling and Atmospheric Assessment Center (IMAAC) for possible assistance in modeling the methane dispersion. IMAAC is a federal interagency with expertise in plume and atmospheric modeling.

**Federal Actions:**

The Region is participating in daily operational calls and providing daily summaries. On 15 December two on-scene coordinators participated in a site tour with the Los Angeles County Fire and Hazardous Materials Unit and representatives from Lawrence Livermore National Laboratory.

[REDACTED]

[REDACTED]

On 18 December the Region issued an information request to SoCal Gas pursuant to the Clean Air Act Section 114.

[REDACTED]

## Proboszcz, Angie

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**From:** Meer, Daniel  
**Sent:** Monday, December 21, 2015 11:16 AM  
**To:** Moore, Letitia  
**Subject:** FW: Administrator Briefing Paper on Aliso Canyon  
**Attachments:** Aliso Canyon Briefing Paper.docx; Aliso Canyon Update 12.21.docx; Letter to Dennis Arriola Request for Info.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

---

**From:** Meer, Daniel  
**Sent:** Monday, December 21, 2015 10:46 AM  
**To:** Manzanilla, Enrique; Quast, Sylvia  
**Subject:** Administrator Briefing Paper on Aliso Canyon

I revised the briefing paper to make it a bit more user friendly. Also attaching the information request and today's update.

But we probably just want to send the briefing paper and the information request back.

dan

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

# ***ATTORNEY CLIENT PRIVILEGE – DO NOT RELEASE***

## **Briefing Paper**

### **Southern California Gas Company Methane Gas Release**

#### **Aliso Canyon Natural Gas Storage Facility**

**21 December 2015**

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**Top Kill Efforts:** SoCal Gas has attempted multiple 'top kill' operations on SS 25, none successful. They are concerned about top kill efforts degrading the integrity of the well bore, so they are cautious with their operations. The next top kill effort will be a so called 'junk shot', that pumps material such as ball bearings in heavy mud down the wellbore, in an attempt to stop the flow of gas. The next top kill operation is scheduled for 23 December, at the earliest.

**Relief Wells:** SoCal Gas is drilling two relief wells. The first relief well is at approximately 3800 feet and the second relief well is scheduled to spud on 22 January 2016. The relief well, if successful, will intercept the bottom of the leaking well and pump in cement. This technique has had great success in controlling blow outs. The drilling operation continues around the clock and the relief wells are estimated to take 3-4 months to complete.

**Environmental and Public Health Issues:** Estimates of how much methane is leaking are not particularly reliable but are reported to be on the order of 2-3 million pounds per day.

Measurements of methane in nearby residential areas show levels that are substantially below the flammability limit and that do not represent an acute health risk. However, exposure to the mercaptan odorant additive in the natural gas can produce symptoms such as nausea, headaches, vomiting, abdominal discomfort, respiratory irritation and dizziness and residents have reported effects that are consistent with short term mercaptan exposure. The LA County Department of Public Health has determined that the emissions from this incident are causing a health effects to some Porter Ranch residents.

**Regulatory Actions:** State and local regulatory agencies and jurisdictions are involved with the response to this methane leak.

**State Agencies:**

Division of Oil, Gas and Geothermal Resources (DOGGR), Department of Conservation, Natural Resources Agency

California Office of Emergency Services;

California Environmental Protection Agency (Cal/EPA).

**Local Agencies:**

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Los Angeles County Fire/HazMat

City of Los Angeles

South Coast Air Quality Management District (SCAQMD)

Los Angeles County Department of Public Health

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Cal/EPA has contacted the Interagency Modeling and Atmospheric Assessment Center (IMAAC) for possible assistance in modeling the methane dispersion. IMAAC is a federal interagency with expertise in plume and atmospheric modeling.

**Federal Actions:**

The Region is participating in daily operational calls and providing daily summaries. On 15 December two on-scene coordinators participated in a site tour with the Los Angeles County Fire and Hazardous Materials Unit and representatives from Lawrence Livermore National Laboratory.

[REDACTED]

[REDACTED]

On 18 December the Region issued an information request pursuant to the Clean Air Act Section 114.

[REDACTED]

## ***PRE DECISIONAL – ATTORNEY CLIENT PRIVILEGE – DO NOT RELEASE***

### **Southern California Gas Company Methane Release**

#### **Aliso Canyon Natural Gas Storage Facility**

**18 December 2015**

**Overview:** On 23 October 2015, an uncontrolled natural gas release was discovered at the Southern California Gas Company (SoCal Gas) Natural Gas Storage Facility at Aliso Canyon, an old oil field in the northern San Fernando Valley, Los Angeles County. SoCal Gas injects natural gas into the abandoned oil reservoir for storage and then withdraws the gas for transmission and sale. SoCal Gas is a subsidiary of Sempra Utilities.

The Aliso Canyon storage facility is located near Porter Ranch, an affluent residential community of approximately 30,000 people. The nearest Porter Ranch residents that are being affected live approximately 1 mile away and 1200 feet below the leaking wellhead.

The Aliso Canyon facility contains 115 gas withdrawal/injection wells and the well that is leaking, Well SS 25, is over 8000 feet deep. Aliso Canyon has a total storage capacity of 86 bcf (billion cubic feet) of natural gas, one of the largest storage facilities in the United States.

Levels of methane, the principal component of natural gas, are being monitored in the residential areas and currently do not represent a significant public health threat.

#### **Current Status:**

**Well Head Preparation:** The 100 foot long bridge/walkway over well head SS 25 was completed without incident on 19 December. This walkway will allow safe access to the compromised well head during top kill operations.

**Relief Well #1:** The drilling of the first relief well is on schedule. The drillers conducted an active magnetic ranging survey over the weekend and are evaluating the data today. Measured depth is approximately 3800'. The magnetic ranging is a technique of putting a magnetic field into the hole to look for surrounding metal (that is, drill pipe from other wells in the area, including SS 25). They have to do these surveys frequently to make sure they know where the SS 25 well is, because that is their target for the relief operation.

**Relief Well #2:** Preparations continue for drilling a second relief well. Spud date (beginning of drilling) is projected for 1/22

**Top Kill Attempt:** The well kill attempt will be on Wednesday at the earliest. SoCal Gas will issue another incident action plan either on 12/21 or 12/22, to describe the top kill procedures.

**Well Field Pressure Regulation:** The maximum rate of withdrawal possible from the field is 1.5 bcf/day. On 23 October, when the leak was discovered, the field contained 77 bcf of gas. Now the field contains 58 bcf. Flowing pressure of the gas is 1285 psi, down 25 psi from 20 December.

**SS 25 Work:** The weather is calm, ideal conditions for wireline logging operations. They are 'going fishing' in drilling parlance, in SS 25, which means lowering tools into the hole on a wire, to clear any blockage, in preparation for the top kill attempt.

**Incident Staffing:** There are 157 people accounted for in the SoCal Gas Incident Action Plan (IAP). SoCal Gas has established a 7 day operational period for their IAP. This may be reduced as they get closer to the top kill attempt that is scheduled for next week.

**Relief Wells:** The first relief well continues to drill and is at approximately 3800 feet. It is on schedule. The plan is to drill vertically and then directionally around the bottom of SS-25 and to kill the well by pumping cement in from the bottom. This technique has had a high rate of success in past blowouts but it takes time and precise and accurate drilling to hit the target at 8500 feet.

**Top Kill Shot:** SoCal Gas will attempt another top kill, this time with a so called 'junk shot' where they pump ball bearings and other material mixed into the heavy drilling mud. The kill shot is scheduled for some time next week and preparation continue with installation of pumps and plumbing. The IAP operational period may be reduced to 24 hours, as they get closer to the kill shot attempt.

**Pressure Regulation:** Bottom hole pressure has been reduced by about 1000 psi, by withdrawing gas from other wells in the vicinity of SS 25. The total capacity of the Aliso Canyon facility has been reduced from 86 bcf to 64 bcf.

**Economics:** SoCal Gas's commodity market for natural gas is an approximately \$2B/yr business. So they have great incentive to get this well under control, so they can get back to business. Most of the gas they are producing now is going into the market. They are losing approximately \$30,000/day in the commodity market. The overall loss to their business operations is not known.

**Other Information:** The biggest concerns of SoCal Gas are safety (an ignition of the gas), community relations and economic impacts of the incident. They have 21 air samplers in the Porter Ranch community and are pulling summa canister samples two times per day. This is far beyond what we would put in place, even if we had the TAGA deployed.

**Site Visit:** On 12/16 OSCs Moxley and Musante had a site tour with LA County Fire/HazMat. They met with the representatives of SoCal Gas, Sempra Energy Utilities and their contractors. Moxley and Musante felt that the operation was being run very professionally, with top experts being brought in and there is little that EPA would add operationally, at this point.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

DEC 18 2015

Via email (DArriola@semprautilities.com) and Certified Mail

CERTIFIED MAIL NO. 7015 0640 0007 0638 0669  
RETURN RECEIPT REQUESTED

In Reply Refer to:  
Southern California Gas Company Aliso Canyon Natural  
Gas Release

Dennis Arriola  
President and CEO  
Southern California Gas Company  
555 W 5th St  
Los Angeles, CA 90013-1010

RE: Request for Information, Southern California Gas Company Aliso Canyon Natural Gas  
Release

Dear Mr. Arriola:

The United States Environmental Protection Agency ("EPA") is conducting an investigation of the natural gas release (the "Release") at the Southern California Gas Company (the "Company's") Aliso Canyon Natural Gas Storage Facility located at 12801 Tampa Ave. in Northridge, CA, (the "Facility") that was discovered on or about October 23, 2015.

With this letter and its enclosure ("Information Request"), EPA seeks additional information and documents concerning the Company's compliance with the Clean Air Act, 42 U.S.C. §§ 7401 *et seq* ("CAA"). This Information Request is authorized pursuant to Section 114 of the CAA, 42 U.S.C. § 9614. Your responses to this letter must be made by a letter, signed by a person or persons duly authorized to represent the Company. Electronic copies of submittals are preferred. EPA believes that much of the requested information is, or should be, readily available at the Facility. If there are any responsive documents or information which you are unable to provide, please provide an explanation for, and documentation of reasons for, the Company's inability to provide that information. Please send your submittals so that they are received by no later than **December 31, 2015**. Address your response to:

Kathryn Lawrence (SFD-9-3)  
Section Chief  
Emergency Prevention and Preparedness Section  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne St.  
San Francisco, CA 94105  
lawrence.kathryn@epa.gov

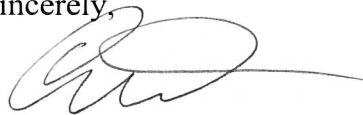
Please note that, pursuant to regulations located at 40 CFR Part 2, Subpart B, you are entitled to assert a business confidentiality claim covering any part of the submitted information as defined in 40 CFR § 2.201(c). Asserting a business confidentiality claim does not relieve you from the obligation to fully respond to this letter. Failure to assert such a claim makes the submitted information subject to public disclosure upon request and without further notice to you, pursuant to the Freedom of Information Act, 5 U.S.C. § 552. Information subject to a business confidentiality claim may be available to the public only to the extent set forth in the above-cited regulation. EPA has the authority to use the information requested herein in an administrative, civil, or criminal action. In addition, EPA has not waived any rights to take enforcement action for past or future violations.

The Company's compliance with this Information Request is mandatory. Failure to respond fully and truthfully may result in an enforcement action being taken in accordance with Section 113 of the CAA, 42 U.S.C. § 7413. This may include civil and administrative penalties of up to \$37,500 per day of noncompliance. In addition, the submission of knowingly false or misleading statements may be punished by a fine pursuant to Title 18 of the U.S. Code, or by imprisonment for not more than two years, or both.

This request for information is not subject to review by the Office of Management and Budget ("OMB" under the Paperwork Reduction Act because it is not a "collection of information" within the meaning of 44 U.S.C. §§ 3502(3), 3507, and 3512. *See, also*, 4 CFR §§ 1320.3(c), 1320.5, and 1320.6(a). Furthermore, this request is exempt from OMB review under the Paperwork Reduction Act because it is part of an investigation of a specific individual or entity. 44 U.S.C. § 3518(c)(1); 5 CFR § 1320.4.

If you have questions about the legal aspects of this Information Request, please contact Ms. Letitia Moore, U.S. EPA Assistant Regional Counsel, at (415) 972-3928 or [moore.letitia@epa.gov](mailto:moore.letitia@epa.gov). The Region IX technical contact for this information request is Kathryn Lawrence, who may be reached at (415) 972-3039 or [johnstone.jeremy@epa.gov](mailto:johnstone.jeremy@epa.gov). We thank you in advance for your cooperation.

Sincerely,



Enrique Manzanilla, Director  
Superfund Division

Enclosures (2)

1 - Information Request

2 - Confidential Business Information

cc (via email w/enclosures):

Jimmie Cho, SoCalGas

John Geroch, DOGGR

Mohsen Nazemi, SCAQMD

Alice Reynolds, CalEPA

Bill Jones, LACFD

Gregory Reynar, LAFD





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105**

Enclosure 1

Information Request  
Southern California Gas Co.

Please provide the information requested in the Information Request section of this Enclosure such that it is received by no later than **December 31, 2015**.

**INSTRUCTIONS**

1. Please provide a separate response to each request, and identify each response by the number of the request to which it corresponds. For each document produced, identify the request to which it is responsive.
2. Knowledge or information that has not been memorialized in any document, but is nonetheless responsive to a request, must be provided in a narrative form
3. All responsive documents must be: a) provided as an accurate and legible copy in a searchable PDF file format; b) submitted on via electronic media (thumb drive, CD, or DVD); and c) number stamped in sequential order (e.g. BATES stamped). Furthermore, data should be provided in spreadsheet format (e.g., Excel format), when available, rather than as image or PDF formats.
4. The scope of this Information Request includes all information and documents obtained or independently developed by the Company, its attorneys, consultants or any of their agents, consultants, or employees.
5. The Company may not withhold any information from EPA on the grounds that it is confidential business information. EPA has promulgated regulations, under 40 CFR Part 2, Subpart B, to protect confidential business information that it receives. The Company may assert a business confidentiality claim (in the manner specified in 40 CFR § 2.203(b)) for all or part of the information requested by EPA. However, business information is entitled to confidential treatment only if it satisfies the criteria set forth in 40 CFR § 2.208. EPA will disclose business information entitled to confidential treatment only as authorized by 40 CFR Part 2, Subpart B. If no claim of confidentiality accompanies the information at the time EPA receives it, EPA may make it available to the public without further notice. [Some EPA Regions refer to an enclosure such as the one I've included as "Enclosure 4" here for further discussion of the CBI issue and process].
6. If information or documents not known or available to the Company at the time of its response to this Information Request later become known or available to it, it must supplement its response to EPA. Moreover, should the Company find at any time after the submission of its response that any portion of the submitted information is false or misrepresents the truth, the Company must notify EPA as soon as possible and provide EPA with a corrected response.

7. If information responsive to a request is not in the Company's possession, custody, or control, identify the persons or entities from whom such information may be obtained. For each individual or entity that possesses responsive information, please provide the following: name, last known or current address, telephone number, and affiliation with the Company or the Facility.

8. If you believe there are grounds for withholding information or documents that are responsive to this request, e.g., attorney-client privilege, you must identify the information or documents and state the basis for withholding the information.

## DEFINITIONS

The following definitions apply to the following terms (words or phrases) as they appear in this Information Request. Defined terms are enclosed in quotation marks:

1. "You" or the "Company" shall mean the Southern California Gas Co., or its officers, managers, employees, contractors, trustees, partners, successors, assigns, and agents.

2. "Facility" means all buildings, equipment, structures, installations, pipes, or stationary items owned, leased, or operated by the Company at the Aliso Canyon Natural Gas Storage Facility property or properties located at 12801 Tampa Ave. in Northridge, CA, or contiguous or adjacent to that address.

3. "Document" or "documents" shall mean any printing, typing, writing, photostat, or any other copy, microfilm, film record, video record, CD, sound recording, tape, disc, or other type of memory associated with computers, including any instructions necessary to read such material, and any other tangible item recording information.

5. "Release" shall mean any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, including the abandonment or discharging of barrels, containers, and other closed receptacles containing any hazardous substances, extremely hazardous substances, regulated substances, air pollutant, pollutants or contaminants. "Release" shall include "accidental release" as that term is defined by 40 C.F.R. § 68.3.

7. "Standard Operating Procedure" or "SOP" means any express method or series of protocols to be followed routinely for the performance of designated operations or in designated situations by you or your subcontractors.

8. "Well SS 25 Release" shall mean the Release of odorized natural gas from Facility Standard Sesnon Well SS 25 that commenced on or about October 23, 2015.

9. All terms not defined herein shall have their ordinary meaning, unless such terms are defined in the CAA, CERCLA, EPCRA, 40 CFR Part 68, 40 CFR Part 300, 40 CFR Part 302, 40 CFR Part 355 or 40 CFR Part 372, in which case the statutory or regulatory definitions shall apply.



## INFORMATION REQUEST

1. Provide the following general information:
  - a. A Facility map and plot plan, to include the well pad for Standard Sesnon Well 25 ("Well SS 25");
  - b. A description of the Facility and operations;
  - c. A management organizational chart for the Facility (include identification of personnel with environmental responsibilities); and
  - d. Descriptive information about any/all other natural gas storage fields owned or operated by the Company and/or its parent corporation.
2. With respect to the Well SS 25 Release provide copies of all submittals made to any local, state or federal agencies relating to the Release as of the date of the response to this Information Request.
3. Unless otherwise provided in response to Item 2 above, provide the following regarding the Well SS 25 Release. If provided in in response to Item 2 above, identify the corresponding document and page numbers.
  - a. A map or other depiction showing, as well as a description of, the point(s) of the Release;
  - b. A description of the cause of the Release, including all known and/or suspected root causes and contributory factors;
  - c. Design specifications for Well SS 25;
  - d. A detailed history of physical changes or modifications made to Well SS 25, including the dates such modifications were implemented and the purpose for which the modifications were made;
  - e. A description of the Company's mechanical integrity program for the inspection, testing and preventive maintenance for Well SS 25, including leak detection;
  - f. All documents that describe Standard Operating Procedures used in the inspection, testing and preventive maintenance of Well SS 25, including leak detection;
  - g. A listing of recognized and generally accepted good engineering practices, used in the development and implementation of the Company's inspection, testing and preventive maintenance of Well SS 25;
  - h. Inspection, maintenance, and leak detection records for Well SS 25 from January 1, 2012 to the present;

- i. All documents that describe Standard Operating Procedures used for accident mitigation or emergency response regarding any risks associated with the maintenance and operation of Well SS 25 or other similarly-situated wells;
- j. A description of current fire safety/prevention measures being implemented both at the Release point(s) and at the Well SS 25 wellhead;
- k. A description of current Incident Command Structure (ICS) organizational structure (ICS 207 or equivalent);
- l. Identification of any/all incident-specific website(s) that any safety and/or regulatory agencies have current access to. Provide access to EPA;
- m. Identify and provide copies of any notifications of the Release made to public agencies, including agency name; date, time and method of notification; whom contacted; and notification/report number (as applicable);
- n. Copies of the Company's policies and procedures with respect to public agency notifications of natural gas leaks at the Facility;
- o. Company-prepared estimates of release rates to the atmosphere (daily, weekly, monthly, and/or yearly) for natural gas, total volatile organic compounds (VOCs) (as defined under 40 CFR § 51.100) and total reduced sulfur (TRS) from Well SS 25 during the Well SS 25 Release, with supporting documentation of methodology/methodologies employed in arriving at estimate(s); and
- p. A description of all activities undertaken, as of the date of your response to this Information Request, to mitigate the rate and quantity of natural gas released during the Well SS 25 Release.



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105**

Enclosure 2

**Confidential Business Information (CBI)  
Assertion and Substantiation Requirements**

You may assert a business confidentiality claim covering all or part of the information you provide in response to this information request for any business information entitled to confidential treatment under section 114(c) of the Clean Air Act (the Act), 42 U.S.C. § 7414(c), and 40 C.F.R. Part 2, subpart B. Under section 114(c) of the Act, you are entitled to confidential treatment of information that would divulge methods or processes entitled to protection as trade secrets. Under 40 C.F.R. Part 2, subpart B, business confidentiality means “the concept of trade secrecy and other related legal concepts which give (or may give) a business the right to preserve the confidentiality of business information and to limit its use or disclosure by others in order that the business may obtain or retain business advantages it derives from its rights in the information.” 40 C.F.R. § 2.201(e).

Information covered by a claim of business confidentiality will be disclosed by the EPA only to the extent, and by means of the procedures, set forth in section 114(c) of the Act and 40 C.F.R. Part 2, subpart B. If you fail to furnish a business confidentiality claim with your response to this information request, the EPA will construe your failure as a waiver of that claim, and the information may be made available to the public without further notice to you.

To assert a business confidentiality claim, you must place on (or attach to) all information you desire to assert as business confidential either a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as “trade secret,” “proprietary,” or “company confidential” at the time you submit your response to this information request. Allegedly confidential portions of otherwise non-confidential documents should be clearly identified, and may be submitted separately to facilitate identification and handling by the EPA. You should indicate if you desire confidential treatment only until a certain date or until the occurrence of a certain event.

The criteria the EPA will use in determining whether material you claim as business confidential is entitled to confidential treatment are set forth at 40 C.F.R. §§ 2.208 and 2.301. These regulations provide, among other things, that you must satisfactorily show that: (1) the information is within the scope of business confidentiality as defined at 40 C.F.R. § 2.201(e); (2) that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so; (3) the information is not and has not been reasonably obtainable by legitimate means without your consent; and (4) the disclosure of the information is likely to cause substantial harm to your business’s competitive position. See 40 C.F.R. § 2.208 (a)-(e). Emission data, as defined at 40 C.F.R. § 2.301(a)(2), is expressly not entitled to confidential treatment under 40 C.F.R. Part 2, subpart B. See 42 U.S.C. § 7414(c); 40 C.F.R. § 2.301(e).

If you assert a claim of business confidentiality in connection with information and documents forwarded in response to this request for information, in accordance with 40 C.F.R.

§ 2.204(e)(4), the EPA is requesting that you answer the following questions with respect to any information or document for which you assert a claim of business confidentiality:

1. What specific portions of the information are alleged to be entitled to confidential treatment? Specify by page, paragraph and sentence when identifying the information subject to your claim.
2. For what period of time do you request that the information be maintained as confidential, e.g., until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, specify that event. Additionally, explain why the information should be protected for the time period you have specified.
3. What measures have you taken to protect the information claimed as confidential from undesired disclosure? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, explain with specificity whether disclosure of the information is likely to result in substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?
7. Is there any other explanation you deem relevant to the EPA's determination of your business confidentiality claim that is not covered in the preceding questions? If so, you may provide such additional explanation.

Submit your answers to the above questions concurrently with your response to this information request if you have claimed any information as business confidential. See 40 C.F.R.

§ 2.204(e)(2). Pursuant to 40 C.F.R. § 2.205(b)(2), you may request an extension of this deadline. The EPA will construe your failure to furnish timely comments as a waiver of your confidentiality claim, consistent with 40 C.F.R. § 2.204(e)(1). Please submit your comments to:

Letitia Moore  
Assistant Regional Counsel  
U.S. EPA Region 9  
75 Hawthorne St.  
San Francisco, CA 94105  
[Moore.letitia@epa.gov](mailto:Moore.letitia@epa.gov)

Pursuant to 40 C.F.R. § 2.205(c), you are hereby advised that information you submit as part of your answers or comments may be regarded by the EPA as entitled to confidential treatment if, when it is received by the EPA, it is marked in accordance with 40 C.F.R. § 2.203(b). As required by 40 C.F.R. § 2.204(e)(6), you may assert a business confidentiality claim covering all or part of your response to these questions, as provided in 40 C.F.R. § 2.203(b). Information covered by such a claim will be disclosed by the EPA only to the extent, and by means of the procedures, set forth in section 114(c) of the Act and 40 C.F.R. Part 2. The EPA will construe the failure to furnish a confidentiality claim with your comments as a waiver of that claim, and the information may be made available to the public without further notice to you.

## Proboszcz, Angie

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**From:** Meer, Daniel  
**Sent:** Monday, December 21, 2015 10:47 AM  
**To:** Manzanilla, Enrique;Quast, Sylvia  
**Subject:** Administrator Briefing Paper on Aliso Canyon  
**Attachments:** Aliso Canyon Briefing Paper.docx; Aliso Canyon Update 12.21.docx; Letter to Dennis Arriola Request for Info.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

I revised the briefing paper to make it a bit more user friendly. Also attaching the information request and today's update.

But we probably just want to send the briefing paper and the information request back.

dan

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

# ***ATTORNEY CLIENT PRIVILEGE – DO NOT RELEASE***

## **Briefing Paper**

### **Southern California Gas Company Methane Gas Release**

#### **Aliso Canyon Natural Gas Storage Facility**

**21 December 2015**

**Overview:** On 23 October 2015, an uncontrolled natural gas release was discovered at the Southern California Gas Company (SoCal Gas) Natural Gas Storage Facility at Aliso Canyon, an old oil field in the northern San Fernando Valley, Los Angeles County. SoCal Gas injects natural gas into abandoned oil reservoirs for storage and then withdraws the gas for transmission and sale. SoCal Gas is a subsidiary of Sempra Energy Utilities.

The Aliso Canyon storage facility contains 115 gas withdrawal/injection wells and the well that is leaking, Well SS 25, is over 8000 feet deep. Aliso Canyon has a total storage capacity of 86 bcf (billion cubic feet), one of the largest natural gas storage facilities in the United States.

Porter Ranch, an affluent residential community of approximately 30,000 people, is located near the Aliso Canyon storage facility. The nearest Porter Ranch residents that are being affected live approximately 1 mile away and 1200 feet below the leaking wellhead.

**Current Status:** SoCal Gas is the responsible party and is attempting to plug the leaking well, with a team of well control contractors. The geology of the area is complex and has complicated the well kill effort. SoCal Gas's response thus far is on two fronts: attempts to kill the well from the top and drilling relief wells to kill the well from the bottom. SoCal has 157 people in their Incident Action Plan, working on this relief effort.

**Top Kill Efforts:** SoCal Gas has attempted multiple 'top kill' operations on SS 25, none successful. They are concerned about top kill efforts degrading the integrity of the well bore, so they are cautious with their operations. The next top kill effort will be a so called 'junk shot', that pumps material such as ball bearings in heavy mud down the wellbore, in an attempt to stop the flow of gas. The next top kill operation is scheduled for 23 December, at the earliest.

**Relief Wells:** SoCal Gas is drilling two relief wells. The first relief well is at approximately 3800 feet and the second relief well is scheduled to spud on 22 January 2016. The relief well, if successful, will intercept the bottom of the leaking well and pump in cement. This technique has had great success in controlling blow outs. The drilling operation continues around the clock and the relief wells are estimated to take 3-4 months to complete.

**Environmental and Public Health Issues:** Estimates of how much methane is leaking are not particularly reliable but are reported to be on the order of 2-3 million pounds per day.

Measurements of methane in nearby residential areas show levels that are substantially below the flammability limit and that do not represent an acute health risk. However, exposure to the mercaptan odorant additive in the natural gas can produce symptoms such as nausea, headaches, vomiting, abdominal discomfort, respiratory irritation and dizziness and residents have reported effects that are consistent with short term mercaptan exposure. The LA County Department of Public Health has determined that the emissions from this incident are causing a health effects to some Porter Ranch residents.

**Regulatory Actions:** State and local regulatory agencies and jurisdictions are involved with the response to this methane leak.

**State Agencies:**

Division of Oil, Gas and Geothermal Resources (DOGGR), Department of Conservation, Natural Resources Agency

California Office of Emergency Services;

California Environmental Protection Agency (Cal/EPA).

**Local Agencies:**

Los Angeles County Certified Unified Program Agency (LA County CUPA)

Los Angeles County Fire/HazMat

City of Los Angeles

South Coast Air Quality Management District (SCAQMD)

Los Angeles County Department of Public Health

DOGGR has issued two orders to SoCal Gas, to provide information on the leaking well (18 November) and to develop plans for expeditiously capturing the escaping gas, stopping the leak and communicating with state and local regulators (10 December). The 10 December order includes the convening of experts from the national laboratories (Lawrence Berkeley, Lawrence Livermore and Sandia) to review data and assist DOGGR in evaluating SoCal Gas's plans for stopping the leak.

The Los Angeles County Department of Public Health ordered SoCal Gas to provide temporary relocation to residents. As of December 1<sup>st</sup>, 778 households had either relocated (282) or were in the process of relocating (496). SoCal Gas has established a community center in Porter Ranch to answer questions and assist residents with temporary relocation and claims.

The Los Angeles City Attorney announced a lawsuit against SoCal Gas for its handling of the methane leak and the SCAQMD has cited SoCal Gas for a public nuisance due to the odors from the mercaptan additive.



Cal/EPA has contacted the Interagency Modeling and Atmospheric Assessment Center (IMAAC) for possible assistance in modeling the methane dispersion. IMAAC is a federal interagency with expertise in plume and atmospheric modeling.

**Federal Actions:**

The Region is participating in daily operational calls and providing daily summaries. On 15 December two on-scene coordinators participated in a site tour with the Los Angeles County Fire and Hazardous Materials Unit and representatives from Lawrence Livermore National Laboratory.

[REDACTED]

[REDACTED]

On 18 December the Region issued an information request pursuant to the Clean Air Act Section 114.

[REDACTED]

## ***PRE DECISIONAL – ATTORNEY CLIENT PRIVILEGE – DO NOT RELEASE***

### **Southern California Gas Company Methane Release**

#### **Aliso Canyon Natural Gas Storage Facility**

**18 December 2015**

**Overview:** On 23 October 2015, an uncontrolled natural gas release was discovered at the Southern California Gas Company (SoCal Gas) Natural Gas Storage Facility at Aliso Canyon, an old oil field in the northern San Fernando Valley, Los Angeles County. SoCal Gas injects natural gas into the abandoned oil reservoir for storage and then withdraws the gas for transmission and sale. SoCal Gas is a subsidiary of Sempra Utilities.

The Aliso Canyon storage facility is located near Porter Ranch, an affluent residential community of approximately 30,000 people. The nearest Porter Ranch residents that are being affected live approximately 1 mile away and 1200 feet below the leaking wellhead.

The Aliso Canyon facility contains 115 gas withdrawal/injection wells and the well that is leaking, Well SS 25, is over 8000 feet deep. Aliso Canyon has a total storage capacity of 86 bcf (billion cubic feet) of natural gas, one of the largest storage facilities in the United States.

Levels of methane, the principal component of natural gas, are being monitored in the residential areas and currently do not represent a significant public health threat.

#### **Current Status:**

**Well Head Preparation:** The 100 foot long bridge/walkway over well head SS 25 was completed without incident on 19 December. This walkway will allow safe access to the compromised well head during top kill operations.

**Relief Well #1:** The drilling of the first relief well is on schedule. The drillers conducted an active magnetic ranging survey over the weekend and are evaluating the data today. Measured depth is approximately 3800'. The magnetic ranging is a technique of putting a magnetic field into the hole to look for surrounding metal (that is, drill pipe from other wells in the area, including SS 25). They have to do these surveys frequently to make sure they know where the SS 25 well is, because that is their target for the relief operation.

**Relief Well #2:** Preparations continue for drilling a second relief well. Spud date (beginning of drilling) is projected for 1/22

**Top Kill Attempt:** The well kill attempt will be on Wednesday at the earliest. SoCal Gas will issue another incident action plan either on 12/21 or 12/22, to describe the top kill procedures.

**Well Field Pressure Regulation:** The maximum rate of withdrawal possible from the field is 1.5 bcf/day. On 23 October, when the leak was discovered, the field contained 77 bcf of gas. Now the field contains 58 bcf. Flowing pressure of the gas is 1285 psi, down 25 psi from 20 December.

**SS 25 Work:** The weather is calm, ideal conditions for wireline logging operations. They are 'going fishing' in drilling parlance, in SS 25, which means lowering tools into the hole on a wire, to clear any blockage, in preparation for the top kill attempt.

**Incident Staffing:** There are 157 people accounted for in the SoCal Gas Incident Action Plan (IAP). SoCal Gas has established a 7 day operational period for their IAP. This may be reduced as they get closer to the top kill attempt that is scheduled for next week.

**Relief Wells:** The first relief well continues to drill and is at approximately 3800 feet. It is on schedule. The plan is to drill vertically and then directionally around the bottom of SS-25 and to kill the well by pumping cement in from the bottom. This technique has had a high rate of success in past blowouts but it takes time and precise and accurate drilling to hit the target at 8500 feet.

**Top Kill Shot:** SoCal Gas will attempt another top kill, this time with a so called 'junk shot' where they pump ball bearings and other material mixed into the heavy drilling mud. The kill shot is scheduled for some time next week and preparation continue with installation of pumps and plumbing. The IAP operational period may be reduced to 24 hours, as they get closer to the kill shot attempt.

**Pressure Regulation:** Bottom hole pressure has been reduced by about 1000 psi, by withdrawing gas from other wells in the vicinity of SS 25. The total capacity of the Aliso Canyon facility has been reduced from 86 bcf to 64 bcf.

**Economics:** SoCal Gas's commodity market for natural gas is an approximately \$2B/yr business. So they have great incentive to get this well under control, so they can get back to business. Most of the gas they are producing now is going into the market. They are losing approximately \$30,000/day in the commodity market. The overall loss to their business operations is not known.

**Other Information:** The biggest concerns of SoCal Gas are safety (an ignition of the gas), community relations and economic impacts of the incident. They have 21 air samplers in the Porter Ranch community and are pulling summa canister samples two times per day. This is far beyond what we would put in place, even if we had the TAGA deployed.

**Site Visit:** On 12/16 OSCs Moxley and Musante had a site tour with LA County Fire/HazMat. They met with the representatives of SoCal Gas, Sempra Energy Utilities and their contractors. Moxley and Musante felt that the operation was being run very professionally, with top experts being brought in and there is little that EPA would add operationally, at this point.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

DEC 18 2015

Via email (DArriola@semprautilities.com) and Certified Mail

CERTIFIED MAIL NO. 7015 0640 0007 0638 0669  
RETURN RECEIPT REQUESTED

**In Reply Refer to:**  
Southern California Gas Company Aliso Canyon Natural  
Gas Release

Dennis Arriola  
President and CEO  
Southern California Gas Company  
555 W 5th St  
Los Angeles, CA 90013-1010

RE: Request for Information, Southern California Gas Company Aliso Canyon Natural Gas  
Release

Dear Mr. Arriola:

The United States Environmental Protection Agency ("EPA") is conducting an investigation of the natural gas release (the "Release") at the Southern California Gas Company (the "Company's") Aliso Canyon Natural Gas Storage Facility located at 12801 Tampa Ave. in Northridge, CA, (the "Facility") that was discovered on or about October 23, 2015.

With this letter and its enclosure ("Information Request"), EPA seeks additional information and documents concerning the Company's compliance with the Clean Air Act, 42 U.S.C. §§ 7401 *et seq* ("CAA"). This Information Request is authorized pursuant to Section 114 of the CAA, 42 U.S.C. § 9614. Your responses to this letter must be made by a letter, signed by a person or persons duly authorized to represent the Company. Electronic copies of submittals are preferred. EPA believes that much of the requested information is, or should be, readily available at the Facility. If there are any responsive documents or information which you are unable to provide, please provide an explanation for, and documentation of reasons for, the Company's inability to provide that information. Please send your submittals so that they are received by no later than **December 31, 2015**. Address your response to:

Kathryn Lawrence (SFD-9-3)  
Section Chief  
Emergency Prevention and Preparedness Section  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne St.  
San Francisco, CA 94105  
lawrence.kathryn@epa.gov

Please note that, pursuant to regulations located at 40 CFR Part 2, Subpart B, you are entitled to assert a business confidentiality claim covering any part of the submitted information as defined in 40 CFR § 2.201(c). Asserting a business confidentiality claim does not relieve you from the obligation to fully respond to this letter. Failure to assert such a claim makes the submitted information subject to public disclosure upon request and without further notice to you, pursuant to the Freedom of Information Act, 5 U.S.C. § 552. Information subject to a business confidentiality claim may be available to the public only to the extent set forth in the above-cited regulation. EPA has the authority to use the information requested herein in an administrative, civil, or criminal action. In addition, EPA has not waived any rights to take enforcement action for past or future violations.

The Company's compliance with this Information Request is mandatory. Failure to respond fully and truthfully may result in an enforcement action being taken in accordance with Section 113 of the CAA, 42 U.S.C. § 7413. This may include civil and administrative penalties of up to \$37,500 per day of noncompliance. In addition, the submission of knowingly false or misleading statements may be punished by a fine pursuant to Title 18 of the U.S. Code, or by imprisonment for not more than two years, or both.

This request for information is not subject to review by the Office of Management and Budget ("OMB" under the Paperwork Reduction Act because it is not a "collection of information" within the meaning of 44 U.S.C. §§ 3502(3), 3507, and 3512. *See, also*, 4 CFR §§ 1320.3(c), 1320.5, and 1320.6(a). Furthermore, this request is exempt from OMB review under the Paperwork Reduction Act because it is part of an investigation of a specific individual or entity. 44 U.S.C. § 3518(c)(1); 5 CFR § 1320.4.

If you have questions about the legal aspects of this Information Request, please contact Ms. Letitia Moore, U.S. EPA Assistant Regional Counsel, at (415) 972-3928 or [moore.letitia@epa.gov](mailto:moore.letitia@epa.gov). The Region IX technical contact for this information request is Kathryn Lawrence, who may be reached at (415) 972-3039 or [johnstone.jeremy@epa.gov](mailto:johnstone.jeremy@epa.gov). We thank you in advance for your cooperation.

Sincerely,



Enrique Manzanilla, Director  
Superfund Division

Enclosures (2)

1 - Information Request

2 - Confidential Business Information

cc(via email w/enclosures):

Jimmie Cho, SoCalGas

John Geroch, DOGGR

Mohsen Nazemi, SCAQMD

Alice Reynolds, CalEPA

Bill Jones, LACFD

Gregory Reynar, LAFD





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105**

Enclosure 1

Information Request  
Southern California Gas Co.

Please provide the information requested in the Information Request section of this Enclosure such that it is received by no later than **December 31, 2015**.

**INSTRUCTIONS**

1. Please provide a separate response to each request, and identify each response by the number of the request to which it corresponds. For each document produced, identify the request to which it is responsive.
2. Knowledge or information that has not been memorialized in any document, but is nonetheless responsive to a request, must be provided in a narrative form
3. All responsive documents must be: a) provided as an accurate and legible copy in a searchable PDF file format; b) submitted on via electronic media (thumb drive, CD, or DVD); and c) number stamped in sequential order (e.g. BATES stamped). Furthermore, data should be provided in spreadsheet format (e.g., Excel format), when available, rather than as image or PDF formats.
4. The scope of this Information Request includes all information and documents obtained or independently developed by the Company, its attorneys, consultants or any of their agents, consultants, or employees.
5. The Company may not withhold any information from EPA on the grounds that it is confidential business information. EPA has promulgated regulations, under 40 CFR Part 2, Subpart B, to protect confidential business information that it receives. The Company may assert a business confidentiality claim (in the manner specified in 40 CFR § 2.203(b)) for all or part of the information requested by EPA. However, business information is entitled to confidential treatment only if it satisfies the criteria set forth in 40 CFR § 2.208. EPA will disclose business information entitled to confidential treatment only as authorized by 40 CFR Part 2, Subpart B. If no claim of confidentiality accompanies the information at the time EPA receives it, EPA may make it available to the public without further notice. [Some EPA Regions refer to an enclosure such as the one I've included as "Enclosure 4" here for further discussion of the CBI issue and process].
6. If information or documents not known or available to the Company at the time of its response to this Information Request later become known or available to it, it must supplement its response to EPA. Moreover, should the Company find at any time after the submission of its response that any portion of the submitted information is false or misrepresents the truth, the Company must notify EPA as soon as possible and provide EPA with a corrected response.

7. If information responsive to a request is not in the Company's possession, custody, or control, identify the persons or entities from whom such information may be obtained. For each individual or entity that possesses responsive information, please provide the following: name, last known or current address, telephone number, and affiliation with the Company or the Facility.

8. If you believe there are grounds for withholding information or documents that are responsive to this request, e.g., attorney-client privilege, you must identify the information or documents and state the basis for withholding the information.

## DEFINITIONS

The following definitions apply to the following terms (words or phrases) as they appear in this Information Request. Defined terms are enclosed in quotation marks:

1. "You" or the "Company" shall mean the Southern California Gas Co., or its officers, managers, employees, contractors, trustees, partners, successors, assigns, and agents.

2. "Facility" means all buildings, equipment, structures, installations, pipes, or stationary items owned, leased, or operated by the Company at the Aliso Canyon Natural Gas Storage Facility property or properties located at 12801 Tampa Ave. in Northridge, CA, or contiguous or adjacent to that address.

3. "Document" or "documents" shall mean any printing, typing, writing, photostat, or any other copy, microfilm, film record, video record, CD, sound recording, tape, disc, or other type of memory associated with computers, including any instructions necessary to read such material, and any other tangible item recording information.

5. "Release" shall mean any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, including the abandonment or discharging of barrels, containers, and other closed receptacles containing any hazardous substances, extremely hazardous substances, regulated substances, air pollutant, pollutants or contaminants. "Release" shall include "accidental release" as that term is defined by 40 C.F.R. § 68.3.

7. "Standard Operating Procedure" or "SOP" means any express method or series of protocols to be followed routinely for the performance of designated operations or in designated situations by you or your subcontractors.

8. "Well SS 25 Release" shall mean the Release of odorized natural gas from Facility Standard Sesnon Well SS 25 that commenced on or about October 23, 2015.

9. All terms not defined herein shall have their ordinary meaning, unless such terms are defined in the CAA, CERCLA, EPCRA, 40 CFR Part 68, 40 CFR Part 300, 40 CFR Part 302, 40 CFR Part 355 or 40 CFR Part 372, in which case the statutory or regulatory definitions shall apply.



## INFORMATION REQUEST

1. Provide the following general information:
  - a. A Facility map and plot plan, to include the well pad for Standard Sesnon Well 25 ("Well SS 25");
  - b. A description of the Facility and operations;
  - c. A management organizational chart for the Facility (include identification of personnel with environmental responsibilities); and
  - d. Descriptive information about any/all other natural gas storage fields owned or operated by the Company and/or its parent corporation.
2. With respect to the Well SS 25 Release provide copies of all submittals made to any local, state or federal agencies relating to the Release as of the date of the response to this Information Request.
3. Unless otherwise provided in response to Item 2 above, provide the following regarding the Well SS 25 Release. If provided in in response to Item 2 above, identify the corresponding document and page numbers.
  - a. A map or other depiction showing, as well as a description of, the point(s) of the Release;
  - b. A description of the cause of the Release, including all known and/or suspected root causes and contributory factors;
  - c. Design specifications for Well SS 25;
  - d. A detailed history of physical changes or modifications made to Well SS 25, including the dates such modifications were implemented and the purpose for which the modifications were made;
  - e. A description of the Company's mechanical integrity program for the inspection, testing and preventive maintenance for Well SS 25, including leak detection;
  - f. All documents that describe Standard Operating Procedures used in the inspection, testing and preventive maintenance of Well SS 25, including leak detection;
  - g. A listing of recognized and generally accepted good engineering practices, used in the development and implementation of the Company's inspection, testing and preventive maintenance of Well SS 25;
  - h. Inspection, maintenance, and leak detection records for Well SS 25 from January 1, 2012 to the present;

- i. All documents that describe Standard Operating Procedures used for accident mitigation or emergency response regarding any risks associated with the maintenance and operation of Well SS 25 or other similarly-situated wells;
- j. A description of current fire safety/prevention measures being implemented both at the Release point(s) and at the Well SS 25 wellhead;
- k. A description of current Incident Command Structure (ICS) organizational structure (ICS 207 or equivalent);
- l. Identification of any/all incident-specific website(s) that any safety and/or regulatory agencies have current access to. Provide access to EPA;
- m. Identify and provide copies of any notifications of the Release made to public agencies, including agency name; date, time and method of notification; whom contacted; and notification/report number (as applicable);
- n. Copies of the Company's policies and procedures with respect to public agency notifications of natural gas leaks at the Facility;
- o. Company-prepared estimates of release rates to the atmosphere (daily, weekly, monthly, and/or yearly) for natural gas, total volatile organic compounds (VOCs) (as defined under 40 CFR § 51.100) and total reduced sulfur (TRS) from Well SS 25 during the Well SS 25 Release, with supporting documentation of methodology/methodologies employed in arriving at estimate(s); and
- p. A description of all activities undertaken, as of the date of your response to this Information Request, to mitigate the rate and quantity of natural gas released during the Well SS 25 Release.



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105**

Enclosure 2

**Confidential Business Information (CBI)  
Assertion and Substantiation Requirements**

You may assert a business confidentiality claim covering all or part of the information you provide in response to this information request for any business information entitled to confidential treatment under section 114(c) of the Clean Air Act (the Act), 42 U.S.C. § 7414(c), and 40 C.F.R. Part 2, subpart B. Under section 114(c) of the Act, you are entitled to confidential treatment of information that would divulge methods or processes entitled to protection as trade secrets. Under 40 C.F.R. Part 2, subpart B, business confidentiality means "the concept of trade secrecy and other related legal concepts which give (or may give) a business the right to preserve the confidentiality of business information and to limit its use or disclosure by others in order that the business may obtain or retain business advantages it derives from its rights in the information." 40 C.F.R. § 2.201(e).

Information covered by a claim of business confidentiality will be disclosed by the EPA only to the extent, and by means of the procedures, set forth in section 114(c) of the Act and 40 C.F.R. Part 2, subpart B. If you fail to furnish a business confidentiality claim with your response to this information request, the EPA will construe your failure as a waiver of that claim, and the information may be made available to the public without further notice to you.

To assert a business confidentiality claim, you must place on (or attach to) all information you desire to assert as business confidential either a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as "trade secret," "proprietary," or "company confidential" at the time you submit your response to this information request. Allegedly confidential portions of otherwise non-confidential documents should be clearly identified, and may be submitted separately to facilitate identification and handling by the EPA. You should indicate if you desire confidential treatment only until a certain date or until the occurrence of a certain event.

The criteria the EPA will use in determining whether material you claim as business confidential is entitled to confidential treatment are set forth at 40 C.F.R. §§ 2.208 and 2.301. These regulations provide, among other things, that you must satisfactorily show that: (1) the information is within the scope of business confidentiality as defined at 40 C.F.R. § 2.201(e); (2) that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so; (3) the information is not and has not been reasonably obtainable by legitimate means without your consent; and (4) the disclosure of the information is likely to cause substantial harm to your business's competitive position. See 40 C.F.R. § 2.208 (a)-(e). Emission data, as defined at 40 C.F.R. § 2.301(a)(2), is expressly not entitled to confidential treatment under 40 C.F.R. Part 2, subpart B. See 42 U.S.C. § 7414(c); 40 C.F.R. § 2.301(e).

If you assert a claim of business confidentiality in connection with information and documents forwarded in response to this request for information, in accordance with 40 C.F.R.

§ 2.204(e)(4), the EPA is requesting that you answer the following questions with respect to any information or document for which you assert a claim of business confidentiality:

1. What specific portions of the information are alleged to be entitled to confidential treatment? Specify by page, paragraph and sentence when identifying the information subject to your claim.
2. For what period of time do you request that the information be maintained as confidential, e.g., until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, specify that event. Additionally, explain why the information should be protected for the time period you have specified.
3. What measures have you taken to protect the information claimed as confidential from undesired disclosure? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, explain with specificity whether disclosure of the information is likely to result in substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?
7. Is there any other explanation you deem relevant to the EPA's determination of your business confidentiality claim that is not covered in the preceding questions? If so, you may provide such additional explanation.

Submit your answers to the above questions concurrently with your response to this information request if you have claimed any information as business confidential. See 40 C.F.R.

§ 2.204(e)(2). Pursuant to 40 C.F.R. § 2.205(b)(2), you may request an extension of this deadline. The EPA will construe your failure to furnish timely comments as a waiver of your confidentiality claim, consistent with 40 C.F.R. § 2.204(e)(1). Please submit your comments to:

Letitia Moore  
Assistant Regional Counsel  
U.S. EPA Region 9  
75 Hawthorne St.  
San Francisco, CA 94105  
[Moore.letitia@epa.gov](mailto:Moore.letitia@epa.gov)

Pursuant to 40 C.F.R. § 2.205(c), you are hereby advised that information you submit as part of your answers or comments may be regarded by the EPA as entitled to confidential treatment if, when it is received by the EPA, it is marked in accordance with 40 C.F.R. § 2.203(b). As required by 40 C.F.R. § 2.204(e)(6), you may assert a business confidentiality claim covering all or part of your response to these questions, as provided in 40 C.F.R. § 2.203(b). Information covered by such a claim will be disclosed by the EPA only to the extent, and by means of the procedures, set forth in section 114(c) of the Act and 40 C.F.R. Part 2. The EPA will construe the failure to furnish a confidentiality claim with your comments as a waiver of that claim, and the information may be made available to the public without further notice to you.



BRAD SHERMAN  
UNITED STATES CONGRESS

PH: (202) 225-5911  
FAX: (202) 225-5879

December 10, 2015

The Honorable Gina McCarthy  
Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., N.W.  
Washington, DC 20460

Dear Administrator McCarthy:

I am writing to request that the Environmental Protection Agency immediately investigate the unresolved gas leak at the Southern California Gas Co. natural gas storage facility in Aliso Canyon. I ask that the Environmental Protection Agency investigate the cause of the leak, and propose action to mitigate the threat to public health, and expedite the leak's repair.

For over six weeks, noxious gas emanating from a leaking well has been sickening residents of the Porter Ranch neighborhood of Los Angeles, causing headaches, nose bleeds and dizziness<sup>1</sup>. A preliminary Environmental Health Assessment by the Los Angeles County Department of Public Health has confirmed the health threat, noting the "neurological, gastrointestinal, and respiratory symptoms that may result from the inhalation." More than 2,800 residents have inquired about relocation and over 1,200 have already relocated. The situation will only worsen, as Southern California Gas Co. estimates that the leak could continue for months.

The California Air Resources Board estimates that the leak is responsible for nearly 25% of California's daily methane emissions; as you know, methane is an important cause of global climate change. I am also concerned about reports of radon gas and benzene being released into the air.

An immediate investigation has become necessary due to the prolonged period of the leak, the apparent health impacts, and the lack of certainty over when the leak can be stopped.

I am aware that 40 CFR § 68.3 excludes storage facilities from regulation under the Risk Management Program. However, we believe that 42 U.S. Code § 7603, which allows the EPA to "issue such orders as may be necessary to protect public health or welfare or the environment," controls the determination here. A statutory provision inherently trumps any regulation. To be even clearer, the statute explicitly states, "Notwithstanding any other provision of this chapter, the Administrator... may... take such other action as may be necessary."

---

<sup>1</sup> Mendoza, Javier. "Natural gas leak that's sickening Valley residents could take months to fix." *Los Angeles Times*. November 20, 2015.

<sup>2</sup> Favot, Sarah. "Health officials: Porter Ranch gas leak may cause long-term health effects." *Los Angeles Daily News*. December 2, 2015.



Accordingly, it seems clear that you have the statutory authority to:

1. Commence an investigation,
2. Determine all necessary steps to protect the environment and public health, and
3. Require Southern California Gas Co. to implement all such steps.

Sincerely,



Brad Sherman  
Member of Congress

CC:

Department of Oil, Gas & Geothermal Resources  
California Public Utilities Commission  
South Coast Air Quality Management District  
Los Angeles City Councilman Mitchell Englander  
Los Angeles County Supervisor Michael Antonovich

## Proboszcz, Angie

---

**From:** Meer, Daniel  
**Sent:** Wednesday, December 16, 2015 12:42 PM  
**To:** Manzanilla, Enrique;Lawrence, Kathryn;Allen, HarryL;Johnstone, Jeremy  
**Cc:** Lindsay, Nancy;Irizarry, Gilberto;Schumann, Jean;Lee, Eugene;Zabel, Allan  
**Subject:** RE: Alison Canyon Situational Update  
**Attachments:** Aliso Canyon Update 12.16.docx

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

[Use this version.](#) Dan

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

---

**From:** Meer, Daniel  
**Sent:** Wednesday, December 16, 2015 12:33 PM  
**To:** Manzanilla, Enrique; Lawrence, Kathryn; Allen, HarryL; Johnstone, Jeremy  
**Cc:** Lindsay, Nancy; Irizarry, Gilberto; Schumann, Jean; Lee, Eugene  
**Subject:** Alison Canyon Situational Update

Update for 16 December 2015. New information is shaded yellow.

Dan

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)



## ***PRE DECISIONAL – ATTORNEY CLIENT PRIVILEGE – DO NOT RELEASE***

### **Southern California Gas Company Methane Release**

#### **Aliso Canyon Natural Gas Storage Facility**

**16 December 2015**

**Overview:** On 23 October 2015, an uncontrolled natural gas release was discovered at the Southern California Gas Company (SoCal Gas) Natural Gas Storage Facility at Aliso Canyon, an old oil field in the northern San Fernando Valley, Los Angeles County. SoCal Gas injects natural gas into the abandoned oil reservoir for storage and then withdraws the gas for transmission and sale. SoCal Gas is a subsidiary of Sempra Utilities.

The Aliso Canyon storage facility is located near Porter Ranch, an affluent residential community of approximately 30,000 people. The nearest Porter Ranch residents that are being affected live approximately 1 mile away and 1200 feet below the leaking wellhead.

The Aliso Canyon facility contains 115 gas withdrawal/injection wells and the well that is leaking, Well SS 25, is over 8000 feet deep. Aliso Canyon has a total storage capacity of 86 bcf (billion cubic feet) of natural gas, one of the largest storage facilities in the United States.

Levels of methane, the principal component of natural gas, are being monitored in the residential areas and currently do not represent a significant public health threat.

#### **Current Status:**

**Well Head Prep:** Work continues on preparing a walkway to allow safe access to the well head. They are building a 100 foot bridge for this purpose. High northerly winds are making it difficult to run equipment to the wellhead, so progress is slow.

**Relief Wells:** Relief well is on schedule and is currently drilled to 3850'. Casing is in the ground, cemented and logged, to approximately 1845'. There were some anomalies on the well log and the cemented section will be re logged. A second relief well site has been identified and grading has begun to prepare the drill pad.

**Kill Shot Prep:** They continue grading the well pad and bringing in equipment for the next 'top kill' attempt. This includes pumps and the heavy mud that they plan to pump into the well.

**Pressure Regulation:** SoCal Gas continues to withdraw gas from the facility at approximately 1 bcf/day to reduce pressure around SS-25. The top hole pressure is estimated at 1420 psi and bottom hole pressure is estimated at 1800 psi.

SoCal Gas Company has a team of well control experts that are attempting to plug the leaking well. However complex geology of the area is complicating the effort. SoCal Gas is currently

drilling two relief wells that will be used to divert gas flow away from the leaking well, and subsequently heavy muds and fluid will be pumped into the leaking well, to stop the methane release (bottom kill). The leaking well will then be permanently plugged with cement. The drilling operation continues around the clock and the relief well effort is estimated to take 3-4 months to complete. SoCal Gas is also preparing for a 'top kill' attempt, possibly early next week. They have attempted several top kills without success.

**Environmental and Public Health Issues:** Estimates of how much methane is leaking are not particularly reliable but are reported to be on the order of 2-3 million pounds per day. Measurements of methane in nearby residential areas show levels that are substantially below the flammability limit and that do not represent a current health risk. However, exposure to the mercaptan odorant additive in the natural gas can produce symptoms such as nausea, headaches, vomiting, abdominal discomfort, respiratory irritation and dizziness and residents have reported effects that are consistent with short term mercaptan exposure. The LA County Department of Public Health has determined that the emissions from this incident are causing a health effects to some Porter Ranch residents.

**Regulatory Actions:** A large group of state and local regulatory agencies and jurisdictions are involved with the response to this methane leak.

**State Agencies:**

Division of Oil, Gas and Geothermal Resources, Department of Conservation,  
Natural Resources Agency

California Office of Emergency Services;

California Environmental Protection Agency.

**Local Agencies:**

Los Angeles County Certified Unified Program Agency (LA County CUPA)

Los Angeles County Fire/HazMat

City of Los Angeles

South Coast Air Quality Management District (SCAQMD)

Los Angeles County Department of Public Health

The Natural Resources Agency, DOGGR has issued two orders to SoCal Gas, to provide information on the leaking well (18 November) and to develop plans for expeditiously capturing the escaping gas, stopping the leak and communicating with state and local regulators (10 December). The 10 December order includes the convening of experts from the national laboratories (Lawrence Berkeley, Lawrence Livermore and Sandia) to review data and assist DOGGR in evaluating SoCal Gas's plans for stopping the leak.

The Los Angeles County Department of Public Health ordered SoCal Gas to provide temporary relocation to residents. As of December 1<sup>st</sup>, 778 households had either relocated (282) or were in the process of relocating (496). SoCal Gas has established a

The Los Angeles City Attorney announced a lawsuit against SoCal Gas for its handling of the methane leak and the SCAQMD has cited SoCal Gas for a public nuisance due to the odors from the mercaptan additive.

Cal/EPA has contacted the Interagency Modeling and Atmospheric Assessment Center (IMAAC) for possible assistance in modeling the methane dispersion. IMAAC is a federal interagency with expertise in plume and atmospheric modeling.

**Next Steps:**

OSCs Moxley and Musante attended a site tour on 12/16 with LA County Fire/HazMat, Lawrence Livermore National Laboratory and the California Department of Conservation.

The Region's CAA 114 information request should be ready for signature by COB 12/17.

The Region is holding daily situational update calls during the work week, starting on 12/17, at 1100 Pacific time. The Region is also participating in the daily ops call with SoCal Gas.

The Emergency Response, Preparedness and Prevention Branch has assigned an on-scene coordinator and an emergency preparedness and prevention inspector to sit in on the daily operational calls and provide daily summaries. We will develop a staffing plan that will describe how we might bring USEPA assets to assist, if we get a request from California.

[REDACTED]

On 16 December two OSCs will participate with California agencies (DOGGR, Department of Conservation) and representatives from the National Labs (Lawrence Berkeley and Lawrence Livermore) on an informational site tour of the Aliso Canyon leak site.

## Proboszcz, Angie

---

**From:** Meer, Daniel  
**Sent:** Wednesday, December 16, 2015 12:33 PM  
**To:** Manzanilla, Enrique;Lawrence, Kathryn;Allen, HarryL;Johnstone, Jeremy  
**Cc:** Lindsay, Nancy;Irizarry, Gilberto;Schumann, Jean;Lee, Eugene  
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**Follow Up Flag:** Follow up  
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Update for 16 December 2015. New information is shaded yellow.

Dan

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

## ***PRE DECISIONAL – ATTORNEY CLIENT PRIVILEGE – DO NOT RELEASE***

### **Southern California Gas Company Methane Release**

#### **Aliso Canyon Natural Gas Storage Facility**

**16 December 2015**

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[REDACTED]

On 16 December two OSCs will participate with California agencies (DOGGR, Department of Conservation) and representatives from the National Labs (Lawrence Berkeley and Lawrence Livermore) on an informational site tour of the Aliso Canyon leak site.

## **Proboszcz, Angie**

---

**From:** Meer, Daniel  
**Sent:** Tuesday, December 15, 2015 3:14 PM  
**To:** Irizarry, Gilberto;Woodyard, Josh  
**Cc:** Tulis, Dana;Lee, Eugene;Minor, Dustin  
**Subject:** Aliso Canyon Briefing Paper  
**Attachments:** Aliso Canyon briefing paper.docx

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

PREDECISIONAL – DO NOT RELEASE

Chico – if this comes up, here is a briefing paper on Aliso Canyon. We will hold daily calls, starting tomorrow, at 1330 Eastern, I will send you the call in number, if you want to join. Just to keep everyone apprised b/c this baby is heating up as quickly as that methane is escaping.

Ciao, Dan

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)



## ***PRE DECISIONAL – ATTORNEY CLIENT PRIVILEGE – DO NOT RELEASE***

### **Southern California Gas Company Methane Gas Release**

#### **Aliso Canyon Natural Gas Storage Facility**

**15 December 2015**

**Overview:** On 23 October 2015, an uncontrolled natural gas release was discovered at the Southern California Gas Company (SoCal Gas) Natural Gas Storage Facility at Aliso Canyon, an old oil field in the northern San Fernando Valley, Los Angeles County. SoCal Gas injects natural gas into the abandoned oil reservoir for storage and then withdraws the gas for transmission and sale. SoCal Gas is a subsidiary of Sempra Utilities.

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Natural Resources Agency

California Office of Emergency Services;

California Environmental Protection Agency.

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Los Angeles County Fire/HazMat

City of Los Angeles

South Coast Air Quality Management District (SCAQMD)

Los Angeles County Department of Public Health

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**Next Steps:**

The Emergency Response, Preparedness and Prevention Branch has assigned an on-scene coordinator and an emergency preparedness and prevention inspector to sit in on the daily

operational calls and provide daily summaries. We will develop a staffing plan that will describe how we might bring USEPA assets to assist, if we get a request from California.

[REDACTED]

On 16 December two OSCs will participate with California agencies (DOGGR, Department of Conservation) and representatives from the National Labs (Lawrence Berkeley and Lawrence Livermore) on an informational site tour of the Aliso Canyon leak site.

## Proboszcz, Angie

---

**From:** Meer, Daniel  
**Sent:** Monday, December 14, 2015 4:20 PM  
**To:** Johnstone, Jeremy  
**Subject:** RE: KNX News inquiry - ON DEADLINE  
**Attachments:** Aliso Canyon briefing paper.docx

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Your comments were good, used them all

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

---

**From:** Johnstone, Jeremy  
**Sent:** Monday, December 14, 2015 4:15 PM  
**To:** Meer, Daniel  
**Subject:** RE: KNX News inquiry - ON DEADLINE

Where on 2? Which corner?

---

Jeremy Johnstone  
Environmental Engineer  
Emergency Prevention and Preparedness Section (Mail Code SFD-9-3)  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne Street  
San Francisco, CA 94105  
Tel: 415-972-3499  
Cell: 415-816-6584  
email: [johnstone.jeremy@epa.gov](mailto:johnstone.jeremy@epa.gov)

---

**From:** Meer, Daniel  
**Sent:** Monday, December 14, 2015 3:36 PM  
**To:** Johnstone, Jeremy <[Johnstone.Jeremy@epa.gov](mailto:Johnstone.Jeremy@epa.gov)>  
**Cc:** Lawrence, Kathryn <[Lawrence.Kathryn@epa.gov](mailto:Lawrence.Kathryn@epa.gov)>  
**Subject:** RE: KNX News inquiry - ON DEADLINE

Sure if you can. Second floor, his office

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

---

**From:** Johnstone, Jeremy  
**Sent:** Monday, December 14, 2015 3:23 PM  
**To:** Meer, Daniel  
**Cc:** Lawrence, Kathryn  
**Subject:** RE: KNX News inquiry - ON DEADLINE

Some thoughts. Let me know if you wish have questions.

Do you want me to attend the 4:30 with Jared?

---

Jeremy Johnstone  
Environmental Engineer  
Emergency Prevention and Preparedness Section (Mail Code SFD-9-3)  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne Street  
San Francisco, CA 94105  
Tel: 415-972-3499  
Cell: 415-816-6584  
email: [johnstone.jeremy@epa.gov](mailto:johnstone.jeremy@epa.gov)

---

**From:** Meer, Daniel  
**Sent:** Monday, December 14, 2015 2:49 PM  
**To:** Johnstone, Jeremy <[Johnstone.Jeremy@epa.gov](mailto:Johnstone.Jeremy@epa.gov)>  
**Subject:** RE: KNX News inquiry - ON DEADLINE

Tell me what you think of this paper. Don't hold back 😊

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

---

**From:** Johnstone, Jeremy  
**Sent:** Monday, December 14, 2015 2:17 PM  
**To:** Harris-Bishop, Rusty; Mogharabi, Nahal  
**Cc:** Meer, Daniel; Maier, Brent  
**Subject:** RE: KNX News inquiry - ON DEADLINE

On 12/10 Rep. Sherman sent a letter to Administrator McCarthy (attached). As far as I know it has not yet been controlled to the Region for response. That said, I think that it is accurate to state that Region 9 has started to investigate the matter. I don't think that we would want to share specifics at this time but there have been communications with other regulatory agencies although none yet with SoCalGas.

---

Jeremy Johnstone  
Environmental Engineer  
Emergency Prevention and Preparedness Section (Mail Code SFD-9-3)  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne Street  
San Francisco, CA 94105  
Tel: 415-972-3499  
Cell: 415-816-6584

email: [johnstone.jeremy@epa.gov](mailto:johnstone.jeremy@epa.gov)

---

**From:** Harris-Bishop, Rusty  
**Sent:** Monday, December 14, 2015 1:56 PM  
**To:** Johnstone, Jeremy <[Johnstone.Jeremy@epa.gov](mailto:Johnstone.Jeremy@epa.gov)>  
**Cc:** Meer, Daniel <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)>  
**Subject:** Fwd: KNX News inquiry - ON DEADLINE

Hey Jeremy, have we made a decision about this site? Can you respond to me and Nahal? I'm in Southern California and want to make sure Nahal can get back to the reporter by deadline.

Rusty

Sent from my iPhone

Begin forwarded message:

**From:** "Mogharabi, Nahal" <[MOGHARABI.NAHAL@EPA.GOV](mailto:MOGHARABI.NAHAL@EPA.GOV)>  
**Date:** December 14, 2015 at 1:50:54 PM PST  
**To:** "Harris-Bishop, Rusty" <[Harris-Bishop.Rusty@epa.gov](mailto:Harris-Bishop.Rusty@epa.gov)>  
**Subject:** FW: KNX News inquiry - ON DEADLINE

Can you ask Jeremy about this. I know we were asked to step in, but I'm not sure what has come from it.

---

**From:** Peschiutta, Claudia N [<mailto:claudia.peschiutta@cbsradio.com>]  
**Sent:** Monday, December 14, 2015 12:13 PM  
**To:** Mogharabi, Nahal <[MOGHARABI.NAHAL@EPA.GOV](mailto:MOGHARABI.NAHAL@EPA.GOV)>  
**Subject:** KNX News inquiry - ON DEADLINE

Dear Nahal,

Last week, Brad Sherman called on the EPA to launch an investigation into the Porter Ranch gas leak. Has the EPA made a decision on this?

Thank you -

Claudia Peschiutta  
Reporter  
CBS Radio Los Angeles  
5670 Wilshire Blvd. #200  
Los Angeles, CA 90036  
(323) 228-8230  
@reporterclaudia

## **Southern California Gas Company Methane Gas Release**

### **Aliso Canyon Natural Gas Storage Facility**

**14 December 2015**

**Overview:** On 23 October 2015, an uncontrolled natural gas release was discovered at the Southern California Gas Company (SoCal Gas) Natural Gas Storage Facility at Aliso Canyon, an old oil field in the northern San Fernando Valley, Los Angeles County. SoCal Gas injects natural gas into the abandoned oil reservoir for storage and then withdraws the gas for transmission and sale.

The Aliso Canyon storage facility is located near Porter Ranch, an affluent residential community of approximately 30,000 people. The nearest Porter Ranch residents that are being affected live approximately 1 mile away and 1200 feet below the leaking wellhead.

The Aliso Canyon facility contains 115 gas withdrawal/injection wells and the well that is leaking, Well SS 25, is over 8000 feet deep. Aliso Canyon has a total storage capacity of 86 bcf (billion cubic feet) of natural gas, one of the largest storage facilities in the United States.

Levels of methane, the principal component of natural gas, are being monitored in the residential areas and currently do not represent a significant public health threat.

**Current Status:** SoCal Gas Company has a team of well control experts that are attempting to plug the leaking well. However complex geology of the area is complicating the effort. SoCal Gas is currently drilling a relief well that will be used to divert gas flow away from the leaking well, and subsequently heavy muds and fluid will be pumped into the leaking well, to stop the methane release. The leaking well will then be permanently plugged with cement. The drilling operation continues around the clock and the relief well effort is estimated to take 3-4 months to complete.

**Environmental and Public Health Issues:** Estimates of how much methane is leaking are not particularly reliable but are reported to be on the order of 2-3 million pounds per day. Measurements of methane in nearby residential areas show levels that are substantially below the flammability limit and that do not represent a significant health risk. However, exposure to the mercaptan odorant additive in the natural gas can produce symptoms such as nausea, headaches, vomiting, abdominal discomfort, respiratory irritation and dizziness and residents have reported effects that are consistent with short term mercaptan exposure. The LA County Department of Public Health has determined that the emissions from this incident are causing a health effects to some Porter Ranch residents.

**Regulatory Actions:** A large group of state and local regulatory agencies and jurisdictions are involved with the response to this methane leak.

**State Agencies:**

Division of Oil, Gas and Geothermal Resources, Natural Resources Agency  
California Office of Emergency Services;  
California Environmental Protection Agency.

**Local Agencies:**

Los Angeles County Certified Unified Program Agency (LA County CUPA)  
Los Angeles County Fire/HazMat  
City of Los Angeles  
South Coast Air Quality Management District (SCAQMD)  
Los Angeles County Department of Public Health

The Natural Resources Agency, DOGGR has issued two orders to SoCal Gas, to provide information on the leaking well (18 November) and to develop plans for expeditiously capturing the escaping gas, stopping the leak and communicating with state and local regulators (10 December). The 10 December order includes the convening of experts from the national laboratories (Lawrence Berkeley, Lawrence Livermore and Sandia) to review data and assist DOGGR in evaluating SoCal Gas's plans for stopping the leak.

The Los Angeles County Department of Public Health ordered SoCal Gas to provide temporary relocation to residents. As of December 1<sup>st</sup>, 778 households had either relocated (282) or were in the process of relocating (496). SoCal Gas has established a

The Los Angeles City Attorney announced a lawsuit against SoCal Gas for its handling of the methane leak and the SCAQMD has cited SoCal Gas for a public nuisance due to the odors from the mercaptan additive.

Cal/EPA has contacted the Interagency Modeling and Atmospheric Assessment Center (IMAAC) for possible assistance in modeling the methane dispersion. IMAAC is a federal interagency with expertise in plume and atmospheric modeling.

**Next Steps:**

The Emergency Response, Preparedness and Prevention Branch has assigned an on-scene coordinator and an emergency preparedness and prevention inspector to sit in on the daily operational calls and provide daily summaries. We will develop a staffing plan that will describe how we might bring USEPA assets to assist, if we get a request from California.



[REDACTED]

We will provide periodic updates and notification of any changes in status to regional management.

## Proboszcz, Angie

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**From:** Meer, Daniel  
**Sent:** Monday, December 14, 2015 4:17 PM  
**To:** Manzanilla, Enrique  
**Cc:** Minor, Dustin  
**Subject:** Aliso Canyon briefing paper  
**Attachments:** Aliso Canyon briefing paper.docx

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

I will bring copies to the briefing

Daniel A. Meer, Assistant Director  
Superfund Division  
Emergency Response, Preparedness and Prevention Branch  
415.972.3132 (O)  
415.971.6792 (C)

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**Next Steps:**

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[REDACTED]

We will provide periodic updates and notification of any changes in status to regional management.

## **MEMORANDUM**

**SUBJECT: Southern California Gas Company Methane Gas Release  
Aliso Canyon Natural Gas Storage Facility**

**FROM: Jared Blumenfeld  
Regional Administrator, Region 9**

**TO: Matthew Fritz  
Chief of Staff**

**Overview:** On 23 October 2015, an uncontrolled natural gas release was discovered at the Southern California Gas Company (SoCal Gas) Natural Gas Storage Facility at Aliso Canyon, an old oil field in Los Angeles County. SoCal Gas injects natural gas into abandoned oil reservoirs for storage and then withdraws the gas for transmission and sale. SoCal Gas is a subsidiary of Sempra Energy Utilities.

The Aliso Canyon storage facility contains 115 gas withdrawal/injection wells. The leaking well is over 8000 feet deep. Aliso Canyon has a total storage capacity of 86 bcf (billion cubic feet), the second largest natural gas storage facility in the United States.

Porter Ranch, an residential community of approximately 30,000 people, is located 1 mile away. More than 1,800 families have been relocated by the gas company and 1,000 remain on a waiting list. Two local elementary schools with nearly 2,000 schoolchildren and staff are slated to be moved to other schools in January.

**Current Status:** SoCal Gas is the responsible party and is attempting to plug the leaking well with a team of well-control contractors. SoCal Gas is working to kill the well from the top and drilling relief wells to kill the well from the bottom. SoCal has 157 people in their Incident Action Plan working on this relief effort.

SoCal Gas has attempted multiple ‘top kill’ operations, none successful. They are concerned about degrading the integrity of the well bore. The next effort will pump material such as ball bearings in heavy mud down the wellbore in an attempt to stop the flow of gas.

SoCal Gas is drilling two relief wells. The relief well, if successful, will intercept the bottom of the leaking well and pump in cement. This technique has had great success in controlling blow outs. The drilling operation continues around the clock and the relief wells are estimated to take 3-4 months to complete.

**Environmental and Public Health Issues:** Estimates of how much methane is leaking are not particularly reliable but are reported to be on the order of 2-3 million pounds per day. Measurements of methane in nearby residential areas show levels substantially below the flammability limit and that do not represent an acute health risk. However, exposure to the mercaptan odorant additive in the natural gas can produce symptoms such as nausea, headaches, vomiting, abdominal discomfort, respiratory irritation and dizziness. Residents have reported effects consistent with short term mercaptan exposure. The LA County Department of Public Health has determined that the emissions from this incident are causing health effects to some Porter Ranch residents and is requiring that SoCal Gas provide temporary relocation “As the duration of exposure increases, these trace levels can produce significant long-term health effects,” said Department of Public Health Interim Director Cynthia Harding. “As this incident has moved from a short-term exposure event resolved within days, to now a long-term event potentially lasting months, supplemental monitoring of potentially harmful trace chemicals is warranted.”

#### **Regulatory Actions:**

**State Agencies:** Division of Oil, Gas and Geothermal Resources (DOGGR), Department of Conservation, Natural Resources Agency; California Public Utility Commission (CPUC); California Office of Emergency Services (OES); California Environmental Protection Agency (Cal/EPA).

**Local Agencies:** Los Angeles County Certified Unified Program Agency (LA County CUPA) Los Angeles County Fire/HazMat; City of Los Angeles; South Coast Air Quality Management District (SCAQMD); Los Angeles County Department of Public Health

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The CPUC is conducting an investigation to assess SoCal Gas actions before and after the well failure that resulted in the methane gas release. This includes public notification and issues related to operation and maintenance of the storage facility. CPUC has requested information from SoCal Gas and, in coordination with DOGGR, directed SoCal Gas to hire an independent third party to conduct a root-cause analysis of the well blow-out.

The Los Angeles County Department of Public Health ordered SoCal Gas to provide temporary relocation to residents. As of December 1<sup>st</sup>, 778 households had either relocated (282) or were in

the process of relocating (496). SoCal Gas has established a community center in Porter Ranch to answer questions and assist residents with temporary relocation and claims.

The Los Angeles City Attorney announced a lawsuit against SoCal Gas for its handling of the methane leak and the SCAQMD has cited SoCal Gas for a public nuisance due to the odors from the mercaptan additive.

Cal/EPA has contacted the Interagency Modeling and Atmospheric Assessment Center (IMAAC) for possible assistance in modeling the methane dispersion. IMAAC is a federal interagency group with expertise in plume and atmospheric modeling.

#### **Federal Actions:**

The Region is participating in daily operational calls and providing daily summaries. On 15 December, two on-scene coordinators participated in a site tour with the Los Angeles County Fire and Hazardous Materials Unit and Lawrence Livermore National Laboratory. The most direct federal authority is held by the Department of Transportation, Office of Pipeline and Hazardous Materials Safety Administration. However the DOT authority has been delegated to California and it is not clear what action DOT is willing to take in this case.

[REDACTED]

[REDACTED]

On 18 December the Region issued an information request to SoCal Gas pursuant to the Clean Air Act Section 114.

#### **Congressional Interest:**

Region 9 is drafting a response to a letter from Congressman Sherman who is requesting an active EPA role in the response. We have also responded to inquiries from Senator Boxer's office.

[REDACTED]



## Proboszcz, Angie

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**From:** Moore, Letitia  
**Sent:** Monday, December 28, 2015 3:42 PM  
**To:** Minor, Dustin  
**Subject:** FW: Aliso Canyon - [REDACTED]  
**Attachments:** Aliso Canyon - [REDACTED]

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

FYI

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**From:** Manzanilla, Enrique  
**Sent:** Tuesday, December 22, 2015 11:50 AM  
**To:** Cheatham, Reggie <[cheatham.reggie@epa.gov](mailto:cheatham.reggie@epa.gov)>; Natarajan, Nitin <[Natarajan.Nitin@epa.gov](mailto:Natarajan.Nitin@epa.gov)>; Tulis, Dana <[Tulis.Dana@epa.gov](mailto:Tulis.Dana@epa.gov)>  
**Cc:** Jordan, Deborah <[Jordan.Deborah@epa.gov](mailto:Jordan.Deborah@epa.gov)>; Adams, Elizabeth <[Adams.Elizabeth@epa.gov](mailto:Adams.Elizabeth@epa.gov)>; Johnson, Kathleen <[Johnson.Kathleen@epa.gov](mailto:Johnson.Kathleen@epa.gov)>; Quast, Sylvia <[Quast.Sylvia@epa.gov](mailto:Quast.Sylvia@epa.gov)>; Meer, Daniel <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)>; Moore, Letitia <[Moore.Letitia@epa.gov](mailto:Moore.Letitia@epa.gov)>  
**Subject:** Fwd: Aliso Canyon - [REDACTED]

Looping.....

Sent from my iPhone

Begin forwarded message:

**From:** "Blumenfeld, Jared" <[BLUMENFELD.JARED@EPA.GOV](mailto:BLUMENFELD.JARED@EPA.GOV)>  
**Date:** December 22, 2015 at 11:43:22 AM PST  
**To:** "Strauss, Alexis" <[Strauss.Alexis@epa.gov](mailto:Strauss.Alexis@epa.gov)>, "Manzanilla, Enrique" <[Manzanilla.Enrique@epa.gov](mailto:Manzanilla.Enrique@epa.gov)>  
**Subject:** FW: Aliso Canyon - [REDACTED]

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**From:** Blumenfeld, Jared  
**Sent:** Monday, December 21, 2015 5:10 PM  
**To:** Matthew R. Fritz ([fritz.matthew@epa.gov](mailto:fritz.matthew@epa.gov)) <[fritz.matthew@epa.gov](mailto:fritz.matthew@epa.gov)>  
**Subject:** Aliso Canyon - [REDACTED]